REVIEW OF INTERNATIONAL BROADCASTING

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Electronic Communications Privacy Act-- An Update by Benn Kobb

Data processing and telecommunications interests have been lobbying for legislation that would extend federal wiretap laws (not the Communications Act) to cover all types of electronic communications, from sensitive corporate financial data transmitted through satellites to car phone and cordless phone calls.

Fairly late in the process of development of this legislation, SWLs and DXers realized that the bills could criminalize most radio listening, depending on how the language was interpreted. Radio hams became concerned about the bills' effects on their activities. The bills contain internal contradictions and innocuous-seeming but weird "exemptions" that have generated much speculation as to their meaning.

A House of Representatives hearing on the proposed legislation (called the Electronic Communications Privacy Act, H.R. 3378 and S. 1667), was held in Washington January 30. This was the third hearing on HR. 3378.

Witnesses were representatives of AT&T, Southwestern Bell and Tandy Corp. (Radio Shack), Perry Williams of the American Radio Relay League (ARRL), representing hams, and Richard T. "Terry" Colgan, Executive Secretary of the Association of North American Radio Clubs (ANARC).

The ARRL testimony showed a significant change of direction from the approach found in the editorial in the February issue of QST magazine. Instead of attempting to distance licensed amateur operation as far as possible from scanner listening and "casual" listening, as some expected, the ARRL pointed out that "There is legitimate reason for amateurs to have equipment which tunes beyond amateur bands" and "The use of...a multiband radio receiver by a licensed amateur should not subject the amateur to criminal prosecution or harrassment in any fashion."

Even more interesting was the League's statement on how the bill could affect amateur phone patches ("autopatch"). The ARRL appears to have modified its previous position that the bill has nothing to do with autopatch.

The League's written testimony now states that "discussions with Subcommittee staff...yield concerns that the Bill may be interpreted to preclude or limit the ability of amateurs to monitor those amateur radio communications involving telephone interconnect...Overall, it would appear that the Bill does not contain sufficient exemptions for legitimate users of radio spectrum."

AT&T, SW Bell and Tandy gave rather bland presentations. The telephone interests supported the bill and recommended toughening its "protections" for electronic communications. (If there is a DX god, I hope He/She/It doesn't give AT&T what it wants.) Tandy wanted "protection" for cellular and all encrypted communications.

The final witness was ANARC's Terry Colgan. Playing a tape of various kinds of encrypted communications, and speaking on behalf of shortwave and scanner listeners, Colgan woke up the packed hearing chamber with what this reporter believes was a badly needed dose of reality. Members of ANARC clubs can be proud that their organization provided them an articulate spokesman with an informed, technically competent testimony. This is in contrast to the well-financed but sleep-inducing and technically misleading statements made by some of the legislation's backers.

Colgan displayed, but did not play, a tape of cellular phone calls recorded off of an $80 TV set by utility DXer Robert Horvitz. Playing the tape might have introduced Section 705 concerns by divulging the contents of the recorded conversations.

Here are some excerpts from the ANARC testimony:

"The Americans who own shortwave radios and scanners come from every walk of life; many of them are elderly and many are disabled. Radio listening is one way for them to find out what is happening in their communities, their country and the world. The vast majority of these casual listeners are unaware of H.R. 3378 and how it might affect them.

"Furthermore, the ambiguous wording of the bill has caused many

hobbyists to believe that the provisions of the bill would not apply to them. These Americans are thus unable to have their voices heard."

"As a practical matter, we have serious concerns about the vague and overly-broad language used in parts of the bill. That language could make it unlawful for Americans, whether hobbyists or casual listeners, to listen to most of the radio spectrum. While this is undoubtedly a side effect unintended by the bill's framers, the result could be an almost complete reversal of United States public policy relating to radio communications."

I have the sense that the ANARC and ARRL statements have impacted the legislators' thinking in this proceeding. The bill's proponents (including the American Civil Liberties Union, Telocator Network of America, the Electronic Mail Association, the Cellular Telecommunications Industry Association and other groups) are now trying to figure out how to do a comeback. The ANARC and ARRL positions have eroded to some degree the proponents' momentum towards "protecting" all electronic communications from reception by what one congressman termed "citizens who are snoops."

(Whatever happens to the rest of the spectrum, the final version of the bill may still "protect" cellular car phone transmissions. Industry observers regard this possibility as inane, as there are at least as many if not more non-cellular VHF and UHF car phones as there are cellular car phones. At any rate, cellular calls can be received on some TV sets, videocassette recorders, spectrum analyzers, service monitors and, of course, scanners with 800 MHz capability.)

Many other hams and SWLs contributed to the effort that will in the end hopefully allow us to listen to receivers without having to look over our shoulder.

REVIEW OF INTERNATIONAL BROADCASTING STATION RATINGS (1985 SURVEY)

In the spring of 1985, 500 randomly-selected U.S. subscribers (all in the contiguous 48 states) were sent a questionnaire asking about their shortwave listening habits and preferences. Completed questionnaires were returned by 303 of the recipients. In the main section of the questionnaire, respondents were asked how often they listen to the shortwave stations which broadcast to North America or are regularly heard on this continent. The numbers in this table are the mean number of days per month each station is listened to by the respondents. (Respondents were asked to standardize by assuming all months have 28 days and four weeks.)--Kim Andrew Elliott, 4444 Connecticut Ave NW, #407, Washington DC 20008 (202) 485-7047 -office

16.1	BBC	1.0	Australian B.C. domestic
9.4	Radio Canada International	1.0	Radio Finland
6.9	Radio Australia	1.0	Vatican Radio
6.9	Radio Netherlands	0.9	Voice of Greece
6.9	Voice of America	0.9	Trans World Radio (Bonaire)
5.0	Deutsche Welle	0.9	Radio Portugal
5.0	Radio Moscow	0.8	Radio Sofia
4.8	Armed Forces Radio	0.8	Radio Cairo
3.4	WRNO (New Orleans)	0.8	RAI (Italy)
3.3	Swiss Radio International	0.8	U.A.E. Radio (Dubai)
3.1	Radio RSA (South Africa)	0.7	Radio Tirana
3.0	HCJB (Ecuador)	0.7	Radio New Zealand
2.8	Radio France International	0.7	Voice of Turkey
2.8	Spanish Foreign Radio	0.7	Soviet domestic services
2.6	Kol Israel	0.6	Africa Number One (Gabon)
2.4	Austrian Radio	0.6	Radio Berlin Int'l (GDR)
2.4	Radio Beijing	0.6	Radio Budapest
2.3	Radio Havana	0.6	Radio Korea (Seoul)
2.2	Radio Sweden International	0.6	Radio Norway International
2.0	Radio Japan	0.6	Radio Tahiti
1.6	CBC Northern Quebec Service	0.6	WYFR (Oakland/Okeechobee)
1.6	Voice of Nicaragua	0.5	CFCX (Montreal)
1.6	Voice of Free China (Taiwan)	0.5	Radio Kiev
1.5	Radio Nacional Brazil	0.4	Radio Pyongyang
1.2	Belgian Radio	0.4	Radio Polonia
1.2	Radio Prague	0.4	Radio Bucharest
1.1	CFRX (Toronto)	0.3	Radio Vilnius
1.0	RAE (Argentina)		

radio equipment forum

CONDUCTED BY LOREN COX, JR 1106 CLEVELAND AVE LEXINGTON, KY 40505

the question being "What is the 'exalted carrier'?" Is it the received carrier that is being "rectified" or is it the locally generated carrier (BFO) that is the "exalted carrier"? In very simplified [illegible] 2[illegible]0 years from the Central Electronics [illegible] and others it appears that the locally generated carrier is the "exalted carrier" - a strong, steady carrier that is used to replace the received one in

In regard to the little rememberance of times past that occupied us in RIB105, I was delighted to receive a letter from Mr Paul G. Stecher of Pensacola, Fl. He writes:

> Many thanks for the article on Doerle receivers. I bought my first radio - a TRF set using using '27 tubes - in 1931, but soon was attracted to "Short Waves and Long Raves", which was the title of an article in a Short Wave Craft I purchased on a Kansas City, Kansas newsstand. Being employed (at $18 a week) I was able to get a mail order Doerle kit from a Cortlandt St. (N.Y.) store. On McGhee St. in Kansas City, MO, I got a marvelous book on Radio Physics by A. Ghirardi and a couple of second hand "cans" (earphones). The two tube Doerle set worked right away. To me, it was better than the National AGS or the Hammarlund Comet Pro (had no RF stage) which I could not afford but tried out at the dealer's. I think my Doerle set was more sensitive, but (it) had two enormous drawbacks: lack of selectivity and hand-capacity (effects). You put on your "cans" and your fingers on the dial knob and the regenerative control which you had to back up for good AM reception; but you did not dare to remove a finger or change your position in your chair without much squealing and loss of the station you were listening to. W2XE, GSL and DJC were my favorites. The 45 Volt A batteries and the bias voltage C battery (something entirely different from what you call a "C" battery nowadays) proved to be too expensive until I found a (second hand) Raytheon battery eliminator, which induced hum but needed no replacement.

Thanks Paul! I, and I think others, would appreciate hearing more about your radioing experiences during the "golden age" of our hobby: stations heard, band conditions, radios you used and how they compare with today's "marvels". The virtue of regenerative receivers was, of course, sensitivity with a very simple circuit and a minimum of parts. Selectivity, though poor, was still good for a single tuned circuit. The hand capacity effect and finicky antenna coupling could generally be eliminated by means of an RF amplifier stage ahead of the detector. A tuned RF amplifier was preferable, but an "aperiodic" type was sometimes used. It was just as much fun, and just as rewarding, building and attempting to improve the radio circuits of that other era as it is today with replacing filters, changing AGC constants, replacing detector diodes, etc. in R71s or whatever. Whatever we have can be made at least just a bit better has always been the radio hobbyist's credo. Ghirardi's Radio Physics Course, of which there were a number of editions, was indeed the "bible" of its day for students of radio circuitry and design. It was also run in serialized form in Radio News. The National AGS was that firm's "top of the line" until the HRO came along. A superhet with a TRF amplifier stage and plug-in coils, it was employed for "official broadcast pick-up and general communication" at Byrd's "Little America" base. (Virtually every receiver manufacturer of the day was proclaiming that their receiver was being taken along on the Admiral's expedition: included were McMurdo Silver's unit of special design and the Comet Pro.) The Comet Pro's lacking a TRF amplifier was not an uncommon practice in the early '30s in superhet design, though the better sets soon came to have one, and sometimes two (e.g., the HRO and the Hammarlund Super-Pro). Early superhets tended to be noisy and, until lower noise tubes became available, an RF amplifier contributed to the noise problem. But as more and more powerful stations came on the air, thus exacerbating the image problem, more "front end" selectivity became mandatory for acceptable performance. A virtual twin of the Comet Pro was the Norden "Navy model 34": both had a unique continuous bandspread feature. W2XE was the CBS shortwave outlet. And how I would have loved to have been a listener in the '30s - as I was a bit later - to GSL (BBC) and DJC (Radio Berlin)! If only there were extant recordings. Some SWLs of the time were "into" disc recording. I can imagine this horror: in an attic clean up someone says "Here's that old stack of records Uncle Joe made off that short wave radio of his. Wonder why he fooled with that stuff? Let's get this junk outa here!" I'll bet it happened.

Michael Harla, NJ, wishes to try his hand at a "solid-state" Doerle. Some of the latter day hobbyist magazines offered a few transistor regenerative circuits. And Allied or Lafayette, before their demise, may have had a kit. Let us know the results of your experiments, Mike. Won't be an R70 etc. any more than a "Doerle" of the '30s was a Scott, et al, though Paul could mention one of these devices in the same breath with an AGS and a Comet Pro - well regarded receivers in their day.

Michael writes:

I've done some tinkering with radios, changing filters and such, also kits, but from scratch very little. My attitude to debugging circuits has been one of puzzlement, like the organic reactions I could never get right in labs (and I was a chemistry major then). So, building this set (("Doerle")) would be a step up for me, and getting it to run, a triumph.

Despite your earlier praise of regens (about a year ago in a dpn column) I hadn't seriously thought of trying one. It's the idea of making capacitors & such from scratch that hooked me, especially after reading DeMaw's boosting of such improvisation in July's QST (("The Fine Art of Improvisation" by Doug DeMaw, QST, July, 1985)). I also like the idea of presenting flashbacks of past "states of the art" in REF.

Dick Smith Electronics has recently cut the price of their catalog to $1.00: the catalog has $2.00 of money back coupons. They seem to offer reasonable selection and prices on components, which include those ceramic feed-through capacitors which are part of elegant RF circuit construction, but which most distributors don't seem to stock. Also in the catalog are 15-20 pages of useful-looking data about component codes, semiconductor cross-references, etc. which will make a good reference source for me. They offer several kits, including a "stereo AM detector" (system unspecified) and a 512 MHz counter for $125. ((DS also offer a "$99 Satellite Receiver" kit - "70 MHz" type, a pre-built stereo compatible satellite receiver for $199 (also single conversion) and a Teletext decoder for the WST system - a device which interests me - lc.))

HEATHKIT seem to have become more and more a retailer of ready-built stuff instead of the alternative they used to be. But they're still bringing out new kits - their current catalog introduce ones for an antenna noise bridge, a VLF (to 80m.) converter and an active antenna of the FRA7700/MFJ1020 type. They've also reduced the price of their all-band SW radio (SW-7800) - wonder if they've sold any? ((The SW-7800, as I understand it, was a disaster of RS DX300 proportions. Last I'd heard was that it was "back to the drawing board" with it. Really too bad as a first class receiver from a firm like Heath would be a plus for the promotion of the SWL hobby. They offered a fine "Collins type" limited coverage unit a number of years ago: could be configured for either Ham or broadcast frequencies. - lc))

...ICOM finally did bring out a service manual for the R70, though you may have to write them direct to order one.

Some additional remarks from Mike:

"Sweet Patootie" - Sinclair Lewis wasn't kidding. People did talk like that.

Should all radios have ((be required to have)) SW? I don't think so; I don't think that by itself this would increase SW listenership, and it would make domestic reception unnecessarily expensive for the rest. With the current domestic radio system of numerous local transmitters of good power ((too many of them, in my view, only pumping out RF pollution - lc)), the listener can get acceptable results using cheap unsophisticated radios (e.g., $20 AM-FM clock radios) whose circuitry would be a total loss on SW if their coverage were expanded to those bands. There is probably a need for a cheaply accessed system of domestic radio, even if most of the time it's used for ads, automated music and repetitive sports events ((not to mention all of those of call-in advice giving and opinion proffering "talk" shows - lc)). Making everyone buy a ICF4910 (for instance) to gain access to the system seems unfair to me. There are plenty of good, reasonably priced multiband radios on the market already. If they don't sell much outside of the current SW community, maybe it's because most of the advertising and retailer support (specs, etc.) remained within that community. Even when a department store carries SW radios it's unlikely that the sales people are informed about what's to be heard, propagation, etc. SW radios are rarely discounted or featured in store originated ads (I'm thinking here of department stores, not the NYC mailorder camera shops).

Maybe I'm imagining it, but I also think that a part of the problem lies within our SW community. Reading some of the pubctns, it seems there's a lot of resistance to treating a SW radio as an appliance, as something which can be used to hear stations without a lot of bother. Unless a radio can be used this way on SW, I doubt that SW would have any mass appeal. Don't get me wrong - I myself enjoy operating and modifying my radios, and I'm learning what I can about propagation and circuitry. But I got back into radio to listen to programs, not to work a receiver. And I think that radios with SWBC bands would go unused ((on SW)) by the general public, even if they were forced to buy them, unless they were first turned on to the expanded program options which SW offers. And they can be introduced to these op-

tions without first owning a SW radio via retailers' ads ("consumer ed.").
More on the above from other readers but we'll continue with the remainder of Mike's letter:

I'm working on some ideas for reducing the range of the R70's RIT & will report on same when I've done more. ((According to ICOM the RIT range is about plus/minus 800 Hz either side of the displayed frequency - much greater than is likely ever to be needed. - lc))

I already have an idea of what was to be heard in 1934-35 thanks to a souvenir of that era I found several years ago in a secondhand store. It's a map prepared by RCA Cunningham "Micro-Sensitive" Radiotron, featuring world SW stations on one side, and USA MW on the other. There's some pro SW copy also - the "tune in the world" theme was pretty well developed then. The MW map features a chart for rating your receiver: "If your radio cannot consistently bring in stations of 5000 w. or over located in the 'Good Zone' area (600-1000 mi. distance), call a service man or take your tubes to a dealer for testing." ((This is an excellent indication as to how well medium wave receivers were supposed to perform in those days - radios were expected to pull in stations at a distance, there being many areas with no - or only one - local station. - lc))

"Radio Plus", a new outlet for portables and receiver modifications, has been started by Gerry Thomas. Gerry is a radio enthusiast & technician of whom many RIB readers will have heard. He has described how to improve the selectivity of several receivers by installing/replacing ceramic filters. Several of these filters/service packages are offered in the Radio Plus flyer, which can be had for a stamp from: 3635 Chastin Way, Pensacola, FL 32503.

Returning to the matter of the proposed requirement that all radios (costing more than $30) have shortwave coverage, we have an affirmative vote from John Demmitt, PA, and a second negative vote from John Norfolk, OK. John Demmitt writes:

We have all seen the dumfounded looks on people as we tell them of our SW receivers. Usually the questions are: Do you transmit overseas? Is that a CB? Do you pick up police calls? Perhaps the worst of all questions is the one that goes ..."But I thought only spies used SW?" It is time we dispelled these misconceptions and introduced people to shortwave by making it available to them on all receivers costing $30 or more. By putting these receivers in the hands of the public through the bill H. Dickson Norman of NDXE is attempting to have introduced, the public will be better educated when it comes to what SW really is. We should all write our federal lawmakers and ask our elected officials to support the bill and offer our services to help inform our congressmen in the area of SW if needed. I'm writing my lawmaker now. When are you going to write yours?

But John Norfolk finds this proposed law "somewhat silly, as there are plenty of cheap portables now available that include shortwave". John also provides a quotation from Larry Klein's Stereo Review column in the Oct. '85 issue offering two reasons why hi-fi tuners for the US and Japanese markets do not have SW coverage: 1) insufficient interest in the medium, and 2) additional costs involved. Considering the poor performance of the "AM" section of nearly all hi-fi tuners and receivers I shudder to think of what SW performance would be like. Actually, back in the 1950s, Browning marketed a very good MW/SW tuner (covered MW plus 6-18 MHz). During the 1960s Fisher offered a promising looking tuner with SW coverage. It didn't exactly capture the market.

Personally, I'm for anything that will produce a greater awareness of shortwave (international) radio and its possibilities. Maybe the proposed law would help effectuate this, maybe not. If, as I believe I've said before, nearly all radios had SW coverage there are those who, simply out of curiosity, would give those bands a try. Some might become regular listeners, but most, I suspect, would be only occasional listeners at best. And yet there is, I believe, an untapped market for good SW radios: educated, upscale, curious, world-conscious people who are simply unaware of the medium. And I think SW receiver dealers and manufacturers are at fault for not placing informative advertising in the publications these people read, e.g. the weekly news magazines, Atlantic Monthly, National Geographic, Wall Street Journal, New York Times, etc. As it is their advertising is limited strictly to the hobbyist publications - not the most effective way of increasing the market for SW radios. ICOM, JRC, Kenwood and Panasonic are all capable of producing excellent advertisements: they simply have too limited exposure.

OTHER MATTERS: In regard to the Sansui AM Stereo receiver mentioned in REF/RIB 105, John Norfolk informs us that the unit is compatible with all AM stereo modes. And the Model Nr. of the unit is actually CX990.

JAPAN RADIO CORP's successor to the NRD515, the NRD525, is expected to be available in early 1986. Will presumably be a worthy successor to an excellent receiver, and perhaps at a somewhat lower price. Now if someone will just send me one for review purposes! This receiver, the R71, the R2000 and the FRG8800 will be the Big Four among SWL receivers in 1986. ['525 to go on the market about Apr. 1 --Gary Hickerson, AR]

THAT R71 MEMORY BATTERY and the problems that ensue upon its failure continue to be a topic of discussion in the DX press. But according to an item in the Jan. '86 issue of Monitoring Times, the life of the battery is such that there is likely to be no difficulty for some years, perhaps for the life of the radio. (Actually, the life-expectancy of today's quality consumer shortwave radios is not yet established. As for battery life, I've encountered 1930's radios with bias cells functioning after 35 years.)

William Dang, Calgary, Alberta, sends a couple of reviews of VHF/UHF receivers from the British publication Hi-Fi News & Record Review. The Dec. '83 issue gives good marks to the A.O.R. AR2001 (25-550 MHz coverage) which, I believe, was marketed by Regency in the US as their MX5000. The chief criticism of the receiver was not in regard to performance but "ergonomics", i.e. "human engineering". A review of the Yaesu FRG9600 in the Aug. '85 issue provides further confirmation of that receiver's at best modest performance. Looks like the ICOM R7000 is the best to be had of this type of receiver. Additionally, William writes:

> I have also noticed that, like myself, you are less than blown away by the performance of the present generation of synthesized H.F. receivers and take an interest in the older generation of receivers. Perhaps you could put in a good word for the following receivers that at one time fascinated me, namely the National HRO500 (according to the 1976 Popular Electronics Communications Handbook, it had passband tuning of the IF filter and an IF notch filter), Galaxy R-530 (may have been updated to the R-1530) and the Collins 51S-1 (vacuum tube, may be related to the 51J series). If you know anything about those rigs, I wouldn't mind finding out how they compare with the present day ICOMs, JRCs, etc.

William uses a "venerable" R7A./ Unfortunately, William, I've never had the opportunity to use any of the receivers you mention (except the 51J), but they all have excellent reputations and would probably hold their own (at least) with our better rigs of today. Believe I have mfr's brochures on all of these units which were simply too expensive for all but the most well heeled SWL or Ham. The HRO500 and Galaxy 530 were among the earliest high quality solid-state communications receivers. They were semi-synthesized, using a VFO for final frequency determination (there was also a (I believe) fully synthesized HRO600 - National's best and last receiver). The Collins 51S was a streamlined, fully SSB compatible version of the 51J. Should someone ever throw one of these receivers your way latch onto it. If these early solid state receivers, the HRO500 and R530 had any deficiencies it most likely would have been in the area of RF dynamic range. Yes, I was highly interested in these beautiful boxes when they were on the market, but could only read about them in the manufacturers' propaganda sheets.

This is being written during the holiday week of December 1985... AND...

WHETHER IT WAS MYTH OR HOAX there is no ESKA and Mary is Its Mother!

* *

- T R A N S P O N D E R T O P I C S -

The EUROVISION feed of the Christmas Midnight Mass from Rome (originated by RAI) was presented entire on Satcom F1/12; in progress when I tuned in @ 2300. Whatever one's belief or non-belief it is an aesthetically impressive spectacle.

Rumours continue to abound as to the security - actually the lack of it - of the M/A-Com "Video Cipher II" encryption system with which the programmers, uplinkers and cable companies have been so charmed. Could be a financial fiasco for those who invest in it if it is as easily and cheaply defeatable as is being alleged. And those who engage in this pursuit are not necessarily cheats and thieves: just electronics/computer buffs who can't resist a technical challenge.

CBS continuing to test scramble two of its feeds on Telstar 2 (/15 & /17). However the audio is not phased out. In effect converting TV into radio. Fine with me. And Garrison Keillor (see below).

But WJBK, the CBS Detroit affiliate on Anik D/23, normally encrypted, not in that mode during latter Dec.-early Jan. (a breakdown?). The attitudes and policies of the Canadian govt. toward TVRO - the radio/TV medium perfect for that country - strange and paradoxical. Don't want the populace syphoning the worst of US culture from the skies. Need to maintain "cultural integrity". While Anik emanations shine/resound

upon my Old Kentucky Home.

The competing "radio stations" on Telstar 303/18 continue relaying part time Salt Lake City AM and FM stations: KTKK on FM America (6.2 Wide) and KSFL ("FM 100") and KDYL on North America One (7.56 Narrow and sometimes 6.8 Wide). KDYL provides Mutual News and Larry King (only outlet for King on satellite other than Mutual SCPC feeds). The features of FMA and NAO are evening talk shows for TVRO owners. FMA has video plans. NAO say they'll broadcast Network TV via sat when Networks scramble their station feeds. NAO one evening put up video of hockey from CBC-TV on adjacent transponder. Don't really know quite what to make of these two operations.

UPI Audio has disappeared from Satcom F3/3 5.94. Bob Larson's relig/call-in show still carried (Bob can be amusing). American/Minnesota Public Radio Presentations including "Prairie Home Companion" have been appearing on this sub-carrier. (Speaking of PHC, that program's presenter, Mr Keillor, recently observed that the future of television is...radio - as people discover that their enjoyment is enhanced by turning down the brightness knob! Personally, I can find pictures a distraction.)

Before 1986 shall have joined that innumerable caravan of years now gone it is strongly suggested that the 19 most popular broadcasting/programming services transmitted by satellite shall have been encrypted. Certainly that is the fondest desire of the cable industry which will do anything to effectuate this. The TVRO monster, its LNA fanged members tearing at the entrails of this industry (as cable interests see it), must be slain! They're even going to force the Christians to scramble (i.e. CBN)! But, of course, encryption as a solution to the economic problems of the cable industry is a chimera.

But whatever occurs in this regard the skies are still abundant with at least interesting and often fascinating video and audio for the curious and resourceful. The TVRO/RRO medium is a DXer's paradise with a potential in comparison to which other forms of radio frequency exploration are very pale indeed. There is no way a true radio aficionados can resist its charm and its challenge.

ADDENDUM (9 Jan.): According to an item on "The National" last evening the CBC is dropping all US television programs by 1987. Currently they carry the likes of "Dallas", "Remington Steele" and a few others. That "cultural integrity" bit. But some new television services are to be introduced, including one intended for the US market - for cable systems, they say, but I trust the satellite feed will not be encrypted. TVRO users should advise the CBC of their interest in this service, which will be needed by them after the scrambling mania has taken its toll of the more desired domestic services. Right now there is an excess of transponder availibity on the Canadian "birds". Wish someone could get together a "Commonwealth Channel" with TV and radio from the UKOGBANI, Australia, New Zealand....

NEWS ON MW INTERNATIONAL BROADCASTING IN EUROPE

by Stefano Valianti, Bologna, Italy

As everybody knows, the MW band is used in Europe for international broadcasting as well as home and local services. Two relevant happenings in January have been: first, the appearance of VOA Europe on this band via the relay at Munich on 1197 for 8 hours a day, with only one hour left for simulcast of SW programs in English. Announcements say proudly that "we're VOA Europe" and that the program is available on "cable systems, FM stations and now also on AM 1197". Though the format of VOA Europe would not be anything special to American listeners, I've liked it very much as such programming is not readily available to me elsewhere in the bands.

There are many programs with VOA disc-jockeys, and also at 1510 on Sats and Suns respectively, Casey Kasem's American Top 40 and American Country Countdown. News of 5 to 10 minutes, and weather forecasts for Western Europe are on hours and half hours. Address is P O Box 7616, Washington DC 20044.

The second event was that Radio France Internationale, after starting its own MW station in Paris on 738, also began to broadcast programs (not in parallel with shortwaves) on the "reseau ondes moyennes" of Radio France (network B) during evenings. Basic schedule of this network is as follows: (GMT)

0435 RFI programs for foreign workers, 0600 relay of local FM stations, 0700 Radio Bleue (for older listeners), 1100 relay of local FM stations, 1200 musique non stop F.I.P., 1600 school and university broadcasts, 1900 musique non stop F.I.P., 2000 R.F.I.

So at the beginning of 1986, these are the international services I can hear with my Sony ICF-400 FM/MW/LW at some times during the day: BBC WS (on MW/LW), VOA/VOA Europe, AFRTS (via AFN Germany and SEB-FM Italy), TWR (via Monte Carlo), RTA Alger (on LW/MW), Vatican Radio, RFI, BRT, Deutsche Welle (relay Malta), Deutschlandfunk, Radio Sweden, all East European countries except Hungary (and including Radio Moscow World Service).

C U B A B R O A D C A S T N E W S L E T T E R

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This is the first in a series of newsletters intended to inform interested parties of the latest developments in Cuban broadcast activity, especially as they pertain to interference caused to U.S. medium-wave (AM) broadcasting facilities. Cuban radio interference, a problem since 1964, received national attention in connexion with the controversial Radio Martí program.

The compiler of these newsletters has been monitoring Cuban radio since 1960 and remains the only reliable source of information on current operations on the island. The WORLD RADIO TV HANDBOOK, a Billboard publication, currently sponsors this monitoring program and retains exclusive right to publish the information; the latest list, 97% accurate as of September 1985, appears in the 1986 edition of the WRTH, now available in better bookstores.

RADIO MAMBI DEVASTATED BY CUBAN JAMMING

Radio Mambí, the controversial radio station intended to reach "every last corner of Cuba" with its powerful 50-kW signal and, like its historical namesake, mark "the beginning of the end" of the Castro regime, was, by 26 October 1985, lucky to be listenable even in South Florida, let alone Cuba. WAQI, 710 kHz Miami, known best to its large Cuban-exile listenership as "Aquí - Radio Mambí - La Grande", took over the facilities of what was WGBS on Wednesday 23 October; by that weekend the dream of Miami's Cuban community was shattered.

Mambisa Broadcasting Co., headed by Armando Pérez Roura, whose "Tome nota" commentaries cut sharply at the Cuban régime and its supporters and thus speak eloquently for Florida's embittered Cuban exiles, deliberately sought the WGBS facility and its capacity to blanket Cuba with clear, powerful signals day and night, even exceeding Radio Martí's coverage in that respect, and without the legal restrictions on programming that have rendered the Voice of America's "Cuba service" "innocuous" in some opinions.

Cuba, probably assuming that WAQI was an underground attempt by the Administration to circumvent Radio Martí's Congressionally mandated restrictions on programming, moved swiftly to jam the 710-kHz channel with three of its own powerful stations: CMBC (670 kHz, 50 kW) Havana, CMEC (690 kHz, 50 kW) Santa Clara, and CMHA (630 kHz, 60 kW) Camagüey, all on Cuba's Radio-Rebelde national network. Previously the frequency had seen no Cuban activity since the mid 1960's, now even clear-channel WOR is reportedly difficult listening outside of the New-York-City metropolitan area.

Cuba's intense jamming of "Radio Mambí, La Grande" may be good news to the State Department, since the act is a clear and blatant violation of ITU regulations. State is trying to resolve the Cuban-interference problem through the International Telecommunications Union in Geneva; Cuba is a member thereof.

Thus far the VOA's Radio Martí program has avoided WAQI's fate; nominal low-level jamming has not increased since the program's inauguration last May over a 50-kW transmitter in the Florida Keys that previously carried regular VOA programming in Spanish since the days of the Cuban Missile Crisis of October 1962. Cuba's reluctance to increase jamming has not so much to do with

"innocuous" programming as with a clause in the Radio Broadcasting to Cuba Act which restricts operations to 1180 kHz in Marathon UNLESS Cuban interference to the station increases by 25%. In other words, any attempt to increase jamming to Radio Martí will only backfire on Cuba and free the VOA to add more transmitters and frequencies to the effort; Cuba would appear not to be looking for trouble at this time.

"TOURIST" STATION NO HOLIDAY FOR K.S.L.

Tourists and visitors to Cuba now have their own radio station to listen to. American radio listeners trying to tune in to Salt Lake City's KSL (1160 kHz) may also learn about the island's many fabulous vacation sites. Programming over "Tour Radio Taíno" (ta-EE-no) in Spanish and English began last fall over a 75-kW transmitter located some 26 miles SSE of Havana. Fortunately for now, the station signs off nightly at 6 PM, too early to be the problem for KSL that it once was.

This station is not new; it has appeared in various disguises since December 1981, including the "Voice of Cuba" in English as well as carring all three major Cuban radio networks at different times since. Broadcasting from a 600-foot radio tower, it puts out a nighttime skywave signal much stronger than its true power would suggest.

CUBA DOES "FRIENDLY" MEXICO A FAVOR AT U.S. EXPENSE

México's most powerful AM station, 250-kW XEW operating on 900 kHz, had a Cuban-interference problem of its own: station CMKB, a Radio-Progreso affiliate serving eastern Cuba from a 50-kW transmitter in Cacocum, near Holguín. XEW complained, and Cuba obliged by changing frequencies to 880 kHz. Now it's a problem for WCBS in New York. It's nice doing favors for your friends!

BROADCASTING TO CUBA STARTED WITH KENNEDY

Radio Martí has been presented to the American public as a "first". It was far from it!

Radio Américas, a CIA operation, broadcast to Cuba from 1961 to 1968 on the AM frequency of 1160 kHz (the same as KSL's) with a power of 50-kW from Swan Island, located in the Caribbean south of Cuba. There was also a "Comité Pro Libertad de Cuba" which ran "Radio Cuba Libre", a short program heard by Cubans over such U.S. stations as WGBS Miami, WWL New Orleans, and WKWF Key West. A second VOA outlet paralleled the Marathon transmitter from 1962 until 1965; it was located on Sugarloaf Key (near Key West) and broadcast over 1040 kHz with 50 kW. And, at the height of the Cuban Missile Crisis of 1962, some dozen U.S. AM commercial stations (possibly yours), beamed VOA programming to Cuba, and one even voluntarily carried programs in Russian! Today we are down to three: WAQI and WQBA, both in Miami, and the VOA's Radio Martí in Marathon.

Were it not for its overblown publicity, Radio Martí would have been ranked as the most expensive and least effective of many previous attempts to broadcast to Cuba over the AM band.

-30-

gh: Latest development: WAQI has been promoting its "seven new towers" to overcome Castro's jamming, going into use Feb. 24; at the same time moving into new studio facilities.

THE RADIO WAR AGAINST NICARAGUA

(abbreviated version) by Howard H. Frederick, Ph.D.
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Nicaragua is suffering a veritable torrent of foreign radio signals penetrating its borders. In a world linked by instantaneous electronic and broadcast communication, Nicaragua is caught up in a radio war with foreign powers possessing superior broadcast resources and bent on winning the hearts and minds of the Nicaraguan population.

The Nicaraguan government is hard-pressed to respond to this external radio threat. The sixteen-station, state-run CORADEP (Corporación de Radiodifusión del Pueblo--People's Radio Broadcasting Corporation) network is beset on all sides by broadcasters with far more resources and signal strength. CORADEP's signals, unlike those of a number of its foreign competitors, do not even reach the entire country.

In 1985, seventy-six foreign AM and FM radio stations penetrate Nicaraguan territory. One-third of these foreign stations emanate from Costa Rica, while another one-fifth come from Honduras. Other regional broadcasts from Belize, Colombia, Cuba, El Salvador, Guatemala, México, Netherlands Antilles, Panamá, the United States and Venezuela are heard in the country. In addition, dozens of shortwave stations, both governmental and clandestine are entering the country.

Because of the characteristics of AM and FM radio signal propagation, reception is not uniform throughout the country. However, the sites of greatest counterrevolutionary activity are also the most highly penetrated by foreign radio. Matagalpa and Estelí departments can hear thirty-three foreign stations. Only two Nicaraguan government stations broadcast in this region. The nearby mountainous departments of Matagalpa and Jinotega are penetrated by 27 stations. The area around Bluefields is second in penetration of foreign radio, with twenty-seven non-Nicaraguan stations available on the ordinary radio. There is only one Nicaraguan station in that zone.

In fact, the government-owned and operated CORADEP network has only fifteen stations with signals of varying qualities to cover the entire country. They have primary responsibility for responding to the 75 external stations penetrating Nicaragua. Formed on April 26, 1981 by Decree 109 of the Junta of National Reconstruction, the People's Broadcasting Corporation currently operates its stations with old, poorly maintained equipment of North American manufacture. (This presents a critical problem today because of the U.S. trade embargo.) Everything from tape to microphones is in short supply. Transmitter capacities range from 1 kilowatt to 10 kilowatts.

Typical of many of these foreign stations is Radio Impacto, heard throughout Nicaragua. Impacto can be counted on to carry the news and views of the counterrevolutionary forces. About one-quarter of the items on a typical Impacto newscast deal with Nicaragua. Radio Impacto, like Radio Free Europe and Radio Liberty, acts as an "alternative home service."

Impacto's continual "contra" orientation is not lost on the Nicaraguan authorities. On December 29, 1984, Sandinista security officers arrested Impacto's correspondent in Managua, Salomón Salvo Arrieta, according to Radio Noticias, for disseminating "reportage that distorts Nicaraguan reality, threatens the country's security, and is aimed at causing Nicaragua's relations with neighboring countries to deteriorate." Calvo also was accused of giving news and information to a contra station. This was the second reported incident of harassment of Impacto reporters. In 1984, Sandinista Tribunals arrested, tried and convicted Luís Manuel Mora Sánchez to nine years imprisonment. He received a pardon after six months.

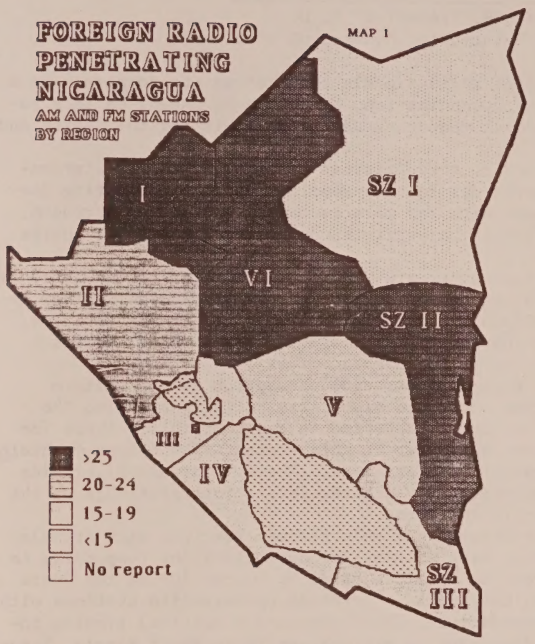
Also opposing the Nicaraguan government is the Voice of Honduras (HRN) broadcasting from Tegucigalpa. On July 4, 1985, the station interrupted its morning talk show with a suspicious live two-hour report of an attack by the Nicaraguan army on a Honduran village. Subsequent checking revealed no other mention of the attack in the Honduran or U.S. press. Even a Honduran government spokesman on this very broadcast denied knowledge of the attack. The Nicaraguan press also denied the charge.

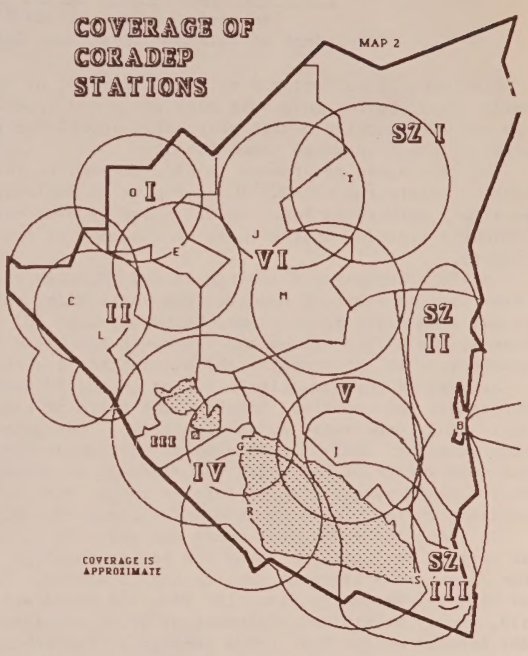
Suspicious was the fact that correspondents were already in the field in a remote corner of the country interviewing eyewitnesses at the time of the alleged attack. The HRN broadcast was a provocation against Nicaragua; its intent was to push the government of Honduras into the position of declaring an emergency and requesting military aid from the United States to drive out the supposed Nicaraguan aggressor.

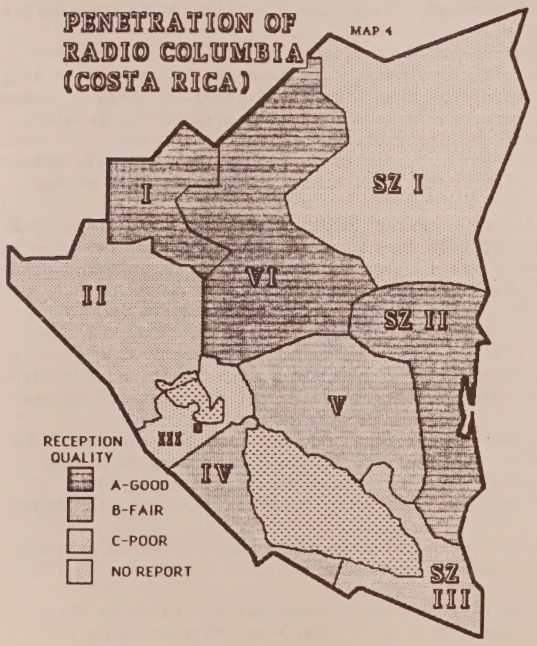
Nicaragua is also subject to several clandestine stations, Radio 15 de Septiembre is thought to be located in Valle de Ángeles, thirty kilometers northeast of Tegucigalpa, though the station claims that it broadcasts from within Nicaragua. The director is Frank Arana, a Nicaraguan expatriate. It is the official voice of the Nicaraguan Democratic Front, the contra organization operating in Honduras.

Broadcasts monitored in July 1985 contained interviews with FDN commanders and Nicaraguan peasants, who revealed details of Sandinista repression and harassment. They also included statements by FDN

(Dr. Frederick is a political scientist specializing in international communication issues at Ohio University. His book Cuban-American Radio Wars will appear this year from Ablex Publishing Corporation in Norwood, New Jersey.)


FOREIGN RADIO PENETRATING NICARAGUA
AM AND FM STATIONS BY REGION
MAP 1
I
II
III
IV
V
VI
SZ I
SZ II
SZ III
>25
20-24
15-19
<15
No report


COVERAGE OF CORADEP STATIONS
MAP 2
SZ I
SZ II
SZ III
I
II
III
IV
V
VI
COVERAGE IS APPROXIMATE


PENETRATION OF RADIO COLUMBIA (COSTA RICA)
MAP 4
I
II
III
IV
V
VI
SZ I
SZ II
SZ III
RECEPTION QUALITY
A-GOOD
B-FAIR
C-POOR
NO REPORT

PENETRATION OF RADIO IMPACTO (COSTA RICA)
MAP 5
I
II
III
IV
V
VI
SZ I
SZ II
SZ III
RECEPTION QUALITY
A-GOOD
B-FAIR
C-POOR
NO REPORT

leaders about battles, death counts and promises of further violence, military music, coded messages and announcements. One interview with "Johnny" and "Henry," both instructors of a regional command, boasted that:

> one day we will walk freely in Nicaragua. Don't worry, we will be in the cities. We will kill the contemptuous Sandinista army that is killing our women and children. We don't want a communist regime. We are commandos for freedom and democracy.

To the sounds of martial music, the announcer proclaims Radio 15 de Septiembre, "voice of the Christian freedom commandos...The puppets of Castro will be destroyed."

Many claims are made about the support of the Nicaraguan people for the contra forces. Commander "Dennis" said "about 80% of the people are on our side. About 40% in the cities are on our side." The Nicaraguan people, it is claimed, are against the "Sandino-communists." "The number of tanks makes no difference because the people support us...We have about 20,000 commandos." Announcers excoriate the Sandinista Defense Committee and the so-called divine mobs allegedly operated by the government.

FDN leader Adolfo Calero Portocarrero is often at the microphone exhorting his supporters and trying to win converts:

> With God and patriotism we will destroy communism. Our forces are growing each day... Our people should not believe what Nuevo Diario and Barricada [Managua newspapers that support the Sandinistas] are saying. Radio Sandino and Radio Nacional [sic] are full of lies. Soon we will be in Managua. They are not capable of confronting our troops. This is the reality.

Radio 15 de Septiembre features statements by ordinary Nicaraguans who have "escaped Sandinista tyranny." One woman complained of the Sandinista militiamen raping women and oppressing Nicaraguan peasants. "You have two small meals a day to keep the Sandinistas in power. Young Nicaraguans, your families are experiencing hunger. 1985 will be the year of victory."

At the opposite side of the country, broadcasting from northern Costa Rica, is the Voice of Sandino --the official station of the Democratic Revolutionary Alliance. Ex-Sandinista Edén Pastora is often heard conducting lessons in guerrilla warfare for Nicaraguans who oppose the government.

> A beehive--at night you cut a hole in the bee hive, place it at the edge of the road, tie a 50-meter rope to it, and pull on the rope when the enemy is close--becomes a weapon... A nail sticking out of a piece of wood covered with mud becomes a powerful weapon, especially if you smear horse or human manure on the tip. This immediately becomes a mortal weapon. When the nail penetrates a shoe it punctures the sole of the soldier's foot and causes gangrene or tetanus.
>
> The FSLN manipulates information but does not realize that actions in the heart of Managua will follow shortly. There in the heart of the FSLN; there where they plot repressive actions, where they plan their servile policy, where they plot mass murders and people's genocide...
>
> Let us fight those communist-Marxist troops, those that imported preconceived schemes; those who deceived Sandinism; those who in the name of Sandinism are establishing a Stalinist revolution, a Leninist revolution, a communist revolution in Nicaragua.
>
> Fight, fight, fight is our war slogan! Our slogan is no longer "Free Homeland or Death" because we no longer want to die. Our slogan is now: Free Homeland or Kill!

One clandestine station supports the Sandinista revolution. Radio Venceremos broadcasts from mobile studios somewhere in eastern El Salvador. Dedicated to setting up a worker/peasant state in El Salvador by overthrowing the Duarte government, Venceremos occasionally makes reference also to Nicaragua:

> Radio Venceremos sends a fraternal and revolutionary greeting to the Nicaraguan people at the time when the modern Hitler, whose planes and cannons kill women and children throughout the world, and warmonger Ronald Reagan is launching new attacks on Nicaragua through an immoral blackmail called an economic embargo... Nicaraguan brothers, with Sandino you expelled the Yankee Marines. You with your vanguard the FSLN defeated the gringo's Somozist project. You will again defeat the Somozist beasts and all the aggressions orchestrated by the new crime boss Ronald Reagan. Neither mercenary bands nor economic embargoes will diminish the will of the Central American peoples, their will to be free and independent. We will win!

To exacerbate this radio war against Nicaragua, the Voice of America has just launched a new AM transmitter in Costa Rica. Its content is expectedly anti-Sandinista. For example, it covered the sixth anniversary of the Nicaraguan revolution this way:

> The Sandinista government tomorrow commemorates the sixth anniversary of its revolution at a time when the country is confronting serious economic problems and a guerrilla war of four years' duration. Sandinista leaders say 400,000 people will attend the ceremonies but among the mass media covering the event will not be an American, Spanish-speaking crew that was deported.
>
> The United States has offered a reward of $100,000 for information leading to the arrest of the murderers of six Americans in El Salvador last month... The reward was offered after an accusation by the U.S. government that Nicaragua could be directly involved in terrorist plans against Americans in Honduras. ...the Nicaraguan government aided the terrorist attack carried out last month in El Salvador.

No mention is made of Nicaragua's progress in six years, nor its ongoing struggle against an external military threat. It reinforces a constant propaganda theme, that Nicaragua is trying to foment revo-

lution elsewhere in the region.

The VOA, like the clandestine contra stations, gives ample coverage to Nicaragua's enemies. When Edén Pastora's helicopter crashed, daily news items followed his rescue and recovery. The hierarchy of the Nicaraguan Catholic Church is especially highlighted:

> Nicaraguan Catholic bishops oppose a national fast by the so-called liberation theology in support of Foreign Relations Minister Miguel D'Escoto's hunger fast... It warned that only the bishops have the authority to envoke a religious act... Father D'Escoto is protesting U.S. support of Nicaraguan rebels trying to overthrow the government.

Costa Rican laws prohibits foreign interests from operating a radio station there. But it does not prohibit the Voice of America from operating a Costa Rican-owned transmitter facility. After learning that the VOA would be violating Costa Rican neutrality by setting up a repeater facility, a group of conservative Costa Rican media executives, journalists and politicians set up the Costa Rican Association for Information and Culture. One of the leaders of this group was Lilia Berrocal, owner of seven other stations, three of which are already penetrating Nicaraguan territory. Sra. Berrocal has defended the move, saying that "the people of northern Costa Rica have been exposed to extensive propaganda from the Nicaraguan communication system."

The Voice of America, through formal agreements with Costa Rican citizens, installed a repeater station at Ciudad Quesada, in north-central Costa Rica and began broadcasting on January 19, 1985. In addition to VOA broadcasts, the transmitter makes a semblance of being a local station by sending out locally produced material of the Costa Rican Association of Information and Culture. In addition to the $3.2 million authorized to build the facility, the VOA will send $168,000 each year to the Association.

Other U.S. activities in the region also point to an increase in the Central American radio war. The U.S. government has agreed to finance a $1.5 million installation of three television transmitters on the Costa Rican-Nicaragua border. U.S. Army officers in Honduras have been promoting another plan to build an AM/FM transmitter in that country to beam programs to Nicaragua. The station would be located at the airfield in San Lorenzo, which U.S. Army engineers have been expanding to handle increased military maneuvers. That plan is currently "on hold." Honduran law prohibits more than one-third foreign ownership of radio stations as well as programming "prejudicial to national sovereignty or democratic institutions."

Part of the Voice of America's expansion in the hemisphere is a $150 million shortwave and medium-wave relay station in Puerto Rico to cover the Caribbean, Central and South America. This project is slated for completion in 1990. Finally, site preparation and engineering studies are reportedly under way for a VOA transmitter in Belize. [already on the air from Punta Gorda on 1530 kHz in January -gh]

The U.S. war against Nicaragua is as much a war of ideas as it is a military one. Armed counter-insurgency and psychological war are part of one common strategy. The CIA's manual on Nicaragua (Psychological Operations in Guerrilla Warfare) states:

> In effect, the human being should be considered the priority objective in a political war. And conceived as the military target of a guerrilla war, the human being has his most critical point in his mind. Once his mind has been reached, the "political animal" has been defeated, without necessarily receiving bullets.
>
> In guerrilla warfare, every combatant should be as highly motivated to carry out propaganda face-to-face as he is as a combatant... The techniques of psychological operations (maximize) the social-psychological effect of a guerrilla movement, converting the guerrilla into a propagandist.

Nicaraguan Vice President Sergio Ramírez Mercado addressed the subject of this war of ideas against Nicaragua in remarks to students at the School of Journalism of the Central American University in Managua. He outlined the five themes that Nicaragua's enemies are using to discredit and delegitimate the revolution in public opinion:

> 1. The revolution pursues a totalitarian system; 2. Nicaragua is attempting to be a base for Soviet penetration in Central America to challenge the interests of U.S. national security; 3. Nicaragua is the field of confrontation in the East-West struggle; 4. Nicaragua is attempting a revolution without borders and systematically exports its revolution; 5. Nicaragua's excessive militarism only shows its expansion goals; its Army is ready, in the offensive sense, to invade and occupy other countries of the area; and in conclusion, as long as the Sandinista Front does not initiate a true national dialogue to include those up in arms, there will be no possibility for peace in the country.

Foreign radio stations using these themes are directing broadcast provocations that threaten regional peace and harmony. The question of the content of communication has been a concern for nations since the founding of the United Nations and before. The first prohibition mentioned in international law is that of war propaganda. Resolution 110 (II) adopted at the 2nd Session of the U.N. General Assembly on November 3, 1947 specifically "condemns all forms of propaganda...which is either designed or likely to provoke, or encourage any threat to the peace, breach of the peace, or act of aggression." U.N. Resolution 127 (II), adopted on November 15 of the same year calls on governments to study meas-

ures that might be advantageous on the national plane to combat, within the limits of constitutional procedures, the diffusion of false or distorted reports likely to injure friendly relations between States. All of these are only recommendations. But the "international Covenant on Civil and Political Rights," adopted on December 16, 1966, explicitly binds States in Article 20, Paragraph 1, to prohibit, by law, any propaganda for war.

Nicaragua is in a perpetual state of siege. The number of victims of contra violence has increased from 73 in 1981 to 4,099 in the first six months of 1984. Attacks are increasingly being carried out against civilians. Government workers, particularly field workers of the Ministry of Agrarian Reform and Ministry of Health, have been killed on their trips to the countryside. In 1984 alone, 94 teachers were killed and another 171 kidnapped. Seventy state farms have been attacked or destroyed. Combining physical damage with lost agricultural revenue, the total damage is now in the range of $1.1 to $1.3 billion, approximately three years' normal export earnings.

But none of this physical and economic hardship measures the war of ideas. The intense penetration by foreign propaganda radio cannot be measured in dollars and lives. But the impact is very real. Only with an end to outside aggressions will Nicaragua be able to move ahead with its programs. In the meantime, its people must suffer physically, economically and mentally.

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DX LISTENING DIGEST

Now there's another publication the same size as RIB with lots more information about shortwave, and DX listening on other bands, too. DXLD concentrates on station news, schedules, DX loggings by country with a cross-reference by frequency, plus ENJOYING RADIO, a technical/philosophical forum edited by David Newkirk. Don't miss out on extensive listening information which appears in DXLD but not in RIB, with its emphasis on programming and opinion; but DXLD also runs program information of time value which would miss the RIB deadline. Currently available in limited supply is DXLD Issue #4; samples are $1.50, subscriptions $1 less than RIB in all cases (see back cover) e.g. $17 by first class in North America; also brought to you by Glenn Hauser, Box 490756, Fort Lauderdale, FL 33349.

FACT SHEET - ELECTRONIC COMMUNICATIONS PRIVACY ACT (see p. 2) is available for business size SASE + loose 22¢ stamp, from ANARC, P O Box 180403, Austin TX 78718-0403 (Terry Colgan, ANARC)

Shortwave for everybody

(Greater Boston Committee, American-Soviet Friendship, Inc., via Lloyd Kannenberg, Weston, MA)

So far 12 million dollars have been spent on Radio Reagan (alias "Radio Marti"). The station broadcasts soap-operas and Latin music of the '50s to Cuba, a country already saturated with signals from commercial Florida stations. We Americans have to learn how to be more selfish! Charity begins at home. Instead of trying to help the help our Cuban neighbors, why not take the 12 million dollars and use it to buy small portable shortwave radios for 200,000 needy Americans? Give 200,000 Americans an opportunity to receive Radio Moscow, the BBC, the MI5, the VOA (USIA "Voice of America"), Radio Havana, and dozens of other stations broadcasting from all continents. Cuba, along with the rest of the world, has known about shortwave for fifty years, but for us technologically-backwards Americans, it would be a whole new experience! Give Americans a chance to hear diverse news perspectives, a chance to compare, choose and participate in the marketplace of ideas! Being able to hear news from various perspectives and regions of the world, being able to hear about the peace and liberation struggles occurring throughout our world -- what a great thing this would be! It is enough to change a pessimist into an optimist. One rediscovers one's ability to think, feel and imagine. What a great favor we would be doing ourselves and our country. Let's spend that 12 million dollars where it is really needed. Let's be selfish for a change!

The 12th World Youth Festival opened with the signature melody of the Radio Moscow World Service: shortwave unites the world, and is known throughout the world! But, by coincidence or design, the existence of shortwave is a well-kept secret in America -- even in the peace movement. We "do not need to know about other countries" because we are "the center of the world" and "the only part that matters". But shortwave not only teaches us about other countries -- it also gives us new ways to look at ourselves. Often Radio Moscow broadcasts American news that American stations refuse to carry -- news about peace, statements made in Congress, and so forth. Most Americans seem to believe everything they hear on ABC/NBC/CBS. Shortwave is different: shortwave forces one to think. Shortwave gives us an opportunity to be critical and skeptical. Perhaps this is its greatest value. It offers ABC/NBC/CBS some badly needed competition.

Recently Philip Johnson, an American listener of Radio Moscow, celebrated the 40th anniversary of humanity's victory over naziism by placing flowers at Arlington National Cemetary, and by sending Radio Moscow a money-order for flowers to be placed at the tomb of the unknown soldier in Moscow. Other listeners participate by sending questions and comments to the "Mailbag" program. Recently RM established a "Radio Bridge" program: listeners send their comments on cassette tape. Comments are then broadcast along with the comments of Soviet citizens. From time to time listeners participate in contests and receive, as prizes, anything from a postcard to a free trip to the Youth Festival. Americans who visit the S.U. are often interviewed: through these interviews with leading and ordinary peace-minded Americans, listeners gain a sense of community.

We recommend the small but powerful 11-band Toshiba RP-F11. Price: about $99. Instead of giving the entire shortwave spectrum, it gives just the international bands: this makes precise tuning very easy. It runs on 4 AA cells, and needs no external antenna. It's the size of a paperback text: good for traveling. Available at Brookline News & Gift, 566-9634 Small shortwave radios are also available at Lechmere's and at similar stores.

CHRISTIAN RADIO--ANOTHER VIEW

by Owen Williamson, KA5UUR

Religious broadcasters catch a lot of flack from RIB contributors and others in the SWL/DX community, especially since they seem to be multiplying on the SW bands. But how much of this criticism is justified, and how much is due to lack of understanding, or even prejudice against the Christian message?

First of all, to understand where religious programmers are coming from and why they do what they do on the air, you've got to try to put yourself in their shoes. This means you have to grant them at least a basic level of sincerity--a person or ministry that's in it for the money is not going to go for shortwave in the first place. If it's money they're looking for, there are plenty of greener pastures than Guatemala or the USSR.

Secondly, to understand religious broadcasting operations, you have to ask, "What if the claims of Jesus of Nazareth as written down in the New Testament are correct?" This may require a suspension of disbelief if you are not into it, but if you've read Dune or even Donald Duck, you've done it before. For just a moment, assume a world in which the teachings of the New Testament are literally true: God, the Devil, Heaven, Hell, miracles, the crucifixion, the resurrection, the whole nine yards. Now what are you going to do?

A fellow ham operator once put it to me in terms of a 'cosmic bet' (with apologies to Paschal):

"Assume you can never scientifically prove the claims of Jesus Christ, or disprove them either. I can bet my life on his claims in either of two possible ways, and it can have 4 possible outcomes, as follow:

"I can accept his claims, that is bet on him, and act accordingly. If I'm right, I win the eternal rewards he promised. If I'm wrong, I've lived a life of deception, and when I die I'm dead, and that's that.

"OR, I can bet against him, and refuse to accept him. If I'm right, I still live out my life, unaffected by Jesus, and when I die I'm dead. Period. But, if I bet against him and I'm proven wrong, I've freely chosen the everlasting nightmare he promised the losers.

"Thus, the maximum possible benefits of belief so far exceed the possible benefits of unbelief, and the possible negative outcomes of unbelief are so much worse than the possible negative effects of mistaken belief--Q.E.D. it is better to believe wholeheartedly!"

It's not the Sermon on the Mount, but it makes you think. Anyhow, in such a world, given our present state of technological development, what would you do if instructed to take the Christian message to the furthest parts of the Earth? Isn't shortwave radio a logical approach?

It's important to recognize that religious broadcasters are in the business of broadcasting that message, and do not exist to occupy scarce bandwidth for the purpose of occupation. Nor do they get some kind of perverse joy out of QRMing All India Radio or your favorite Peruvian. Their technical expertise may not be the best, but they have a mission to accomplish, and a message to share.

Which also means that they don't deliberately create unpalatable or offensive programming to drive away listeners, though I admit I wonder sometimes. I think it is legitimate to ask for radio Bible readings with at least a shred of expression, and without that infuriating "stained-glass voice" that makes Christian radio stand out unpleasantly on shortwave. I think it would serve Christian broadcasters well to keep obscure inter- or intra-church doctrinal polemics off the international airwaves as well. I also wish programmers would remember that Jesus never said "Be ye conservative," and much less, "Lay ye hold of your enemies and kick butt." The identification of Christianity with the USA and particularly the US New Right must surely scandalize as many sincere seekers as it attracts, especially in the Third World. I'd dearly love to hear a Christian broadcaster who could present the whole Gospel in all its revolutionary implications and applications.

But the bottom line is that Christian SW broadcasting has a legitimate mission. I think some SWLs would probably prefer a whole spectrumful of Radio Earths and plain-vanilla Radio Australias and Netherlands, and most DXers would much rather have no SW activity from North America at all, but since that's not the case, Christian radio has as much of a place on the bands as any other outlet, maybe more. Think about it.

I WANT TO BORROW A HUNDRED THOUSAND TO START A CHURCH
THAT'S A LOT OF MONEY TO START A CHURCH!
THE TRANSMITTER ALONE IS FIFTY GRAND
PARKER
HART

(Wizard of Id, by Brant Parker & Johnny Hart, via Frank Allen, Owen Williamson, and Lamont Jensen)
(Cover illustration via Tom McKeon, IN)
(Closing Date for this issue of RIB is 1 March 1986)

LISTENER INSIGHTS on PROGRAMMING

A R G E N T I N A (David R Alpert, New York NY) "We don't send schedules anymore because we change them so often." --heard on RAE mailbag program 28 December. The same show included the reading of a reception report from Ken MacHarg, turning down his request for a QSL, saying he didn't provide enough program details!

A U S T R A L I A (Harry Weatherley, Victoria, Jan. DXers Calling of DX Australia) Keith Glover, broadcaster and friend. In the Oct. issue we announced that Keith Glover was retiring from the Australian Broadcasting Corporation on 28 October 1985. In the article that follows, we take a look at just a few of the happenings while Keith was closely connected with the activities of the Southern Cross DX Club, NZ Radio DX League and DX Australia.

A long career in entertainment and broadcasting commenced during WW II when Keith Glover was a member of an AIR Entertainment Unit touring the Pacific theatre. In 1947 he joined the Australian Broadcasting Commission (now Corp.) and remained with that organisation for 18 years. During that period much of his time was spent as an ABC domestic service and Radio Australia presenter. However, during the late 1950s and 1960s he also hosted a well-liked TV programme. Keith was also a special events announcer and two that quickly come to mind were his description of the opening of Sydney's Opera House and the Silver Jubilee visit to Australia of Queen Elizabeth.

From an international viewpoint, Keith was best known through his MAILBAG programme which he presented over Radio Australia for 25 years until its demise in December 1980. Approximately 35,000 letters were answered on air during that period! When the writer was on Norfolk Island recently, Mrs. Kathy Le Cren who is VL2NI station manager said she loved Keith's distinctly pleasant voice and there is no doubt listeners worldwide would enthusiastically agree. Radio Australia enjoyed very high popularity ratings internationally during the 1960s and 1970s and there would be few who would not agree that Keith Glover was responsible for this in no small way. It is sad that the same cannot be said of the English Language Service of RA these days.

From an SWL/DXer view the CLUB FORUM produced and presented on RA by Keith was the most popular programme. It ran from 1972 until its removal in March 1981--this was a great disappointment to both Keith and his audience alike. The reason given for termination of CLUB FORUM was - financial, but as time has gone on the reason now appears to be - stupidity! It is interesting to note that the last international identity to be interviewed by Keith for CLUB FORUM was Roger Stubbe of HCJB. Thinking back over nearly a decade of those weekly programmes, some well-known names come to mind. An early interview was made with the late Mervyn Branks; then there was the late Norm Maguire of NRC fame. When our own Dr John Campbell was interviewed by Keith, enough material was taped for three programmes and it all went to air! Others heard were Bryan Clark, Chris Martin, Ray Crawford and dozens more. At club conventions Keith was always pleased to send calls out from RA to those attending. Place names such as Cape Jervis, Waitpinga, Port MacDonnell, Waratah, Tiwai, Leithfield, Omaui, etc., are well-known to him. In 1977 Keith and his wife Gwen made an extended tour of New Zealand and were able to attend the NZRDXL Easter Convention held at Godley Head, near the city of Christchurch. Many will remember how, as honorary auctioneer, he 'extracted' the last few cents out of our pockets. In fact, a copy of Issue #1 of "Tune-In" (March 1933) was sold for $10! Later, Invercargill and Bluff were visited for an eventful few days. This is a story in itself and maybe Keith could do several paragraphs on it for DXC in the future. Such antics as pushing Mervyn Branks' car up Bluff hill and sampling Stewart Island oysters at Bluff Wharf.

In 1975 Keith was awarded a Churchill Fellowship and travelled extensively overseas, particularly in Europe. At every opportunity he visited friends made through his MAILBAG programme, and of course called on many international broadcasters. A true humanitarian, Keith has always given much of his spare time to helping charitible organisations.

His overseas listeners have missed Keith since 1981, but we in Australia have heard his voice on radio since then. Thank you, Keith Glover for bringing much pleasure into our homes and we at DXA are honoured to have you as a member.

(Michael Harla, Vineland NJ) On Nov. 23, I note Brandon Telfer presenting TALKBACK, Mike Bird producing. Seems pretty thin compared to the programs Brandon produced for Barry Seeber. I think that the reorganization of RA's schedule, to create blocks of feature programming, was what many of us had been asking for. But I was surprised by the drastic way it was done, especially the cutting back of SOUNDABOUT, although a condensed version may be aired sometime around 1600. Suzanne Dowling is back from her vacation as of 3/2/86.

(Bruce MacGibbon, Gresham OR) Take a look at the changes and see what happened to big changes of emphasis. If you're a music lover, you got a big change, all right. All the music is when you're cutting Zs in North America. But in January, RA sent a notice with the following amendments to the schedule in RIB 106 (also via Kraig W Krist): Mon-Fri 0715 WINDOW ON AUSTRALIA, 0812 INTERNATIONAL REPORT Fri 1610 YOUTH TALK. Sat 0710 MATTERS OF FAITH, 0810 INT'L REPORT, 1612 TALKBACK. Sun 0710 TRAVELLERS' TALES, 0810 INT'L REPORT, 0910 TALKBACK, 0930 TOP HITS. Daily 0910-1100 TOP HITS OR SOUNDABOUT,

(including NEWS at 1000 UTC). Weekday hosts are Rob Hoskin at 0500-1000, Barry Seeber 1000-1400, Peter Cavanagh 1400-1900, Liz Holtham 1900-2400, and Barry Clarke 0000-0500.

gh: & here we go again with more program jumbling: TALKBACK announced that from March 8, it would be on Sat at 0310 & 1610, UTC Sun 0530, 0910, 1230 [conflicting w/AUSTRIAN SW PANORAMA], and 2040.

(Mark L Williams, Emmett ID) On VLW9, 9610, SENTIMENTAL JOURNEY on Jan. 18 was devoted to Lauren Bacall. I found this close-up particularly interesting, but the entire series is so well done, it is difficult to single out any as especially 'better' than the others. On Feb. 8, S.J. gives way to election results. Spot reports separated by music requests; election coverage apparently not expected to go beyond regular 1600 close down. Sundays at 1455, VLW9 has MY WORD, but not the current [BBC WORLD SERVICE] series apparently as the teams are Dilys Powell, Frank Muir, Ann Scott-James, and Dennis Norden, introduced by Jack Longland. Incidentally, I have two of the Muir-Norden books--there may be more by now--which are collections of their MY WORD stories: the first is You Can't Have Your Kayak and Heat It (1973), followed by Upon My Word (1974). Both are from Eyre Methuen Ltd., 11 New Fetter Lane, London EC4P 4EE. Prices were £1.60 and £1.50 respectively, but those may have changed.

C A N A D A (Doug Copeland, Winnipeg, Manitoba, Jan. 27) Another station that carries the DICK CAVETT COMEDY SHOW is CJOB, 680, Winnipeg, Wed. 8:05-10 pm CST.

(Ernie Behr, Kenora Ont, Jan. 25) The proposed CBC Superstation for American viewers is becoming a national joke here in Canada. A half hour of Canadian television is guaranteed to put anyone to sleep, and American shows are the only reason why most Canadians watch the CBC. If CBC-TV goes ahead with its plan to eliminate all US programming, it is safe to say that at least 80% of Canadians will switch to other networks.

(Michael Harla, NJ) Tuning into CBC Radio recently for the first time since Alan McFee departed, I found David Lennick, semmingly reestablished there with a MIDNIGHT CAMP. Could you look into your Radio Guide and tell us more about it?

gh: Well, it's at 12:06 am local nominal, Tue.-Sat., with little detail but the following emphases: Tue, Hollywood and stage greats; Thu, old 78s and other collectibles; Sat, requests (to CBC Toronto).

Here's the content for IDEAS, at 9:05 pm local: Mons, Mar 10 Fair Comment: Words Unwritten, Ideas Unspoken, on Canadian libel laws; Mar 17 & 24, Drawing the Line: Reproductive Technology, on genetic screening, fœtal surgery, test-tube babies, artificial wombs; starting Mar 31 for four weeks, Pasternak, on the Soviet poet, translator, novelist, with Douglas Rain [HAL] as Pasternak, and music by Alexander Scriabin, a family friend. Tues, Mar 11, The World of the Child: Daycare; Mar 18, how children learn; Mar 25, fostering of human bonds and the future of childhood in a technological society. Weds, Mar 12/19/26, Alexis de Tocqueville's Democracy In America. Thurs, Mar 13/20/27, International Film Censorship. Fris, March 14, Halley's Comet; March 21, Malcolm Muggeridge lectures on a global crisis of the spirit; March 28, The Quest for the Holy Grail--music and mythology surrounding it.

(Harold Sellers, Feb DX Ontario) The ODXA's own Rich McVicar has been busy during his work term at RCI. On a recent edition of SWL DIGEST, Ian McFarland read some statistics compiled by Rich from responses to Contests #1 and #2, held on the program some months ago. #1 asked what the favourite regular feature of SWL Digest was. 52.9% said Larry Magne's equipment test reports, 31.7% chose gh's DX news, 6% the Radio Database Int'l reports, 3% the Newcomer's Corner, 2.4% like antenna features, and 1.2% said ANARC reports and interviews conducted by Ian. Contest #2 asked on which target broadcast the listener listened to the program. For the European transmission, 44.5% of the listeners were in Europe, while 55.5% were outside, mostly in the USA. 8.7% of those listening to the African transmission actually lived there, while 91.3% lived outside Africa--half of them in the USA. For the USA transmission, 96.8% of the listeners lived in North America, while 3.2% were in the Caribbean. For the Caribbean beam, 100% of the listeners were outside the area; 82.3% in North America and 17.7% in South America, mostly Guyana.

CBC technicians vote for strike

The Globe and Mail

About 2,300 technicians and other employees at the Canadian Broadcasting Corp. have given their negotiating team a strike mandate.

Members of the National Association of Broadcast Employees and Technicians voted 63 per cent in favor of striking, but no date has been set because the federal conciliation process has not been exhausted.

Bryon Lowe, NABET's chief negotiator, said the vote is evidence that his members oppose a CBC proposal to remove a clause in the current contract that guarantees 2,103 NABET jobs as long as outside technicians are used.

The CBC says it is prepared to offer job-security guarantees to anyone with more than three years' experience in return for dropping this "magic number."

A 112-day strike by NABET members in 1981 disrupted CBC radio and television programming.

The CBC is negotiating contracts with 10,000 unionized employees, and six of 29 collective agreements have been signed.

(Globe & Mail, Feb. 5, via Doug Copeland, Manitoba)

(Andy Sennitt, Denmark) You can't accuse RCI of not giving enough IDs. One recent Sunday at 1906, I noted the following sequence of announcements: Newsreader: "And that was the news from Radio Canada International. You're listening to Radio Canada International," followed by Ian McFarland (on tape) with "you're tuned to Canada, on Radio Canada International". All in the space of about 10 seconds. Still, I suppose they realise that reception conditions are poor, so it helps to give as many IDs as possible.....

(Ottawa Citizen, Jan. 18, 1986, via Doug Copeland, Winnnpeg, Man.)

Radio Canada International: 10-year plan remains in limbo

By Tonda MacCharles
Citizen staff writer

The ambitious CBC report, *Let's Do It*, prepared for the federal task force on broadcasting policy, conjures up a nationalist's broadcasting haven.

For those who have an ear tuned to Canada's international broadcast arm, however, CBC's vision of the future of Canadian broadcasting, made public last week, offered nothing new.

In fact, Radio Canada International, the CBC shortwave arm, is excluded in a proposed six-point strategy "to ensure a strong Canadian broadcasting system."

As far as RCI goes, the report merely parrots the same recommendations as the last projection that was put on paper for RCI: the so-called 10-year plan.

The 10-year plan was drawn up in 1983 and grandly proposed to extend service to the Pacific Rim nations and the Middle East. Those regions are high on RCI's priority list, which is largely determined by External Affairs, because of Canada's trade interests in the Far East and peacekeeping interests in the Middle East.

It's a wish list, if you will, because to extend service would cost an estimated $40 million.

RCI already broadcasts 160 hours of news and commentary a week to more than 13 million people in Eastern Europe and the Soviet Union, Latin America, the Caribbean, Western Europe and North America.

RCI has begun its foray into the Far East with two half-hour programs fed by satellite for rebroadcast in Japan and in Hong Kong, but it's a far cry from making the Pacific Rim second to Eastern Europe and the Soviet Union on the list.

In effect, the 10-year plan is still in limbo.

It's up to the task force chaired by Gerry Caplan and Florian Sauvageau, which is expected to make recommendations in February for government policy, to rally to that vision. Then it's a question of whether the political will is there to implement it.

With the CBC scrounging to cover an anticipated budget shortfall of $60 to $70 million in 1986-87, it's unlikely RCI can expect to see $40-million cheques coming its way.

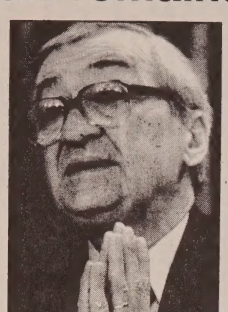
If the CBC has to absorb that shortfall, due to inflation, devaluation of the Canadian dollar, and an early retirement scheme implemented this year, RCI has been told it faces cuts up to $500,000, says RCI spokesman Keith Randall.

RCI now operates on $13.1 million. Its budget was sliced by $670,000 in December 1984 after the federal government lopped $75 million from the CBC's budget.

To those within RCI, it's a given the international broadcast arm should exist.

"Albania has a larger service than we do," says Allan Familiant, programming director. "Anybody who's sensible knows we should exist."

As to RCI's placement in the corporation's priorities, Richard Chambers, a spokesman for CBC President Pierre Juneau, says only that it has "to be assessed."



Pierre Juneau
Rating being assessed

One thing is sure: further cuts will eat into programming.

Randall says RCI's streamlined as much as it can.

One suggestion is that CBC should turn RCI over to External Affairs to ensure separate funding. External Affairs already has a significant say in what countries RCI broadcasts to and in what languages.

Director Betty Zimmerman, an articulate advocate of RCI's editorial independence, bristles at any suggestion that RCI come under External Affairs information services.

"It would be unsuitable for Canada's international voice to be coming from a government department," she said in a recent interview in her spacious fifth-floor Montreal office.

That would mean RCI would be run in much the same way as the United States' international broadcast service, Voice of America, is operated — by the U.S. Information Agency, a branch of the U.S. government.

"We had close links in journalistic concerns with External Affairs. That was perfectly legitimate in times of war and Cold War. It's not legitimate in the '80s," says Zimmerman.

Philip Slyfield, director of external information services at External Affairs, says he's happy with External's role now in suggesting target audiences for RCI, and isn't seeking any more say in RCI operations.

What Zimmerman would like to see is RCI given special funding status within CBC, status that would not be endangered every time there had to be cuts to the domestic service.

That would also guarantee RCI's editorial independence.

Originally conceived in 1942 as a service for Canadian troops overseas, RCI still acts as a news service to Canadian students, travellers and diplomats abroad, but the role it plays as an international information agency, especially to "closed societies" in Eastern Europe and the Soviet Union, is dearer to the hearts of its directors.

Zimmerman and Familiant speak of RCI's "responsibility" to broadcast not only news, but also Canada's views on human rights to the Eastern bloc countries.

That responsibility is taken seriously around RCI, especially because, according to listenership surveys, RCI, unlike its larger Western counterparts, is not jammed by the Soviet Union, says RCI Chief Engineer Paul Morneault.

Jamming is the deliberate interference on a frequency to drown out a signal.

"They are anti-the Giants: British Broadcasting Corporation, Radio Free Europe, and Radio Liberty. We're a small- to medium-sized broadcaster, like Sweden or the Netherlands," says Zimmerman.

The giants of global broadcasting operate on budgets more than 10 times the size of RCI's budget. VOA, second only to the Soviet Union's Radio Moscow, broadcasts in 39 languages 2,017 hours a week at a cost of just over $250 million.

The Soviets are the largest, broadcasting in 84 languages 2,174 hours a week at an estimated cost of $750 million a year, according to a 1982 CIA report to Congress.

Peter Bruck, a Carleton University communications professor and head of the Centre for Communications, Culture and Society (a communications think tank at Carleton University), says RCI is not jammed because it doesn't pose a threat in the Soviet's eyes.

"It is not perceived as being as hostile or relevant in terms of the ideological struggle."

Derek Quinn, a writer for the half-hour weekly program *Canadian Journal* relayed by satellite feed to Hong Kong, says RCI's mandate directs its journalists to reflect Canadian viewpoints. "Reflect" is the operative word. Newscasts are essentially digests of what can be read in Canadian newspapers or heard on domestic broadcasts.

C U B A (via Owen Williamson, El Paso TX) Radio Havana Cuba English program schedule, undated:
Mon-Sat, the first six programs are the same: TODAY IN HISTORY, NEWSCAST, COMMENTARY ON INTERNATIONAL AFFAIRS, SPOTLIGHT ON LATIN AMERICA, TODAY IN SPORTS, FROM THE LAND OF MUSIC. Then:
Mon, PANORAMA, LATIN AMERICAN SONGS, THE WORLD OF STAMPS. Tue, CUBA & THE WORLD, MUSICAL QSL, THE CUBAN STORY. Wed, CUBAN PROFILE, LATIN AMERICAN SONGS, SOCIALISM: THE NEW WORLD. Thu, POST OFFICE BOX 7026, MUSICAL QSL, MARXIST REVIEW. Fri CUBA & THE WORLD, LATIN AMERICAN SONGS, SOCIALISM: THE NEW WORLD. Sat CUBAN CULTURE, MUSICAL QSL, EYEWITNESS AFRICA. Sun: TODAY IN HISTORY, CUBAN PROFILE, THE CUBAN STORY, FROM THE LAND OF MUSIC, POST OFFICE BOX 7026, LATIN AMERICAN SONGS, THE WORLD OF STAMPS.

(Ivan Grighin, Dec DX Ontario) RHC has altered its program line-up quite substantially. Feature programs are now short and snappy, usually about five minutes in length, with lots of Cuban music mixed in between. I have also noted that RHC is playing quite a bit of jazz music, too. They have a half-hour jazz program entitled THE JAZZ PLACE, presented by Jennifer Chin on Sunday nights at 0100, with the usual repeats 2, 4 and 6 hours later. The mailbag show is now only about 5 minutes long, which is enough for about two questions. I've heard it many days during the week at 0145. There is also a new bulletin of tourist news at 0030 during the week. RHC announcer Herman "Havana" Appleton recently returned to the air explaining that his absence from the airwaves was due to a severe illness, but he did not elaborate. He has again been absent from RHC, so I hope it isn't a recurrence of the illness.

(Charles Weiss, S Euclid OH) Unfortunately, RHC periodically sends out unappealing contests like that below, but doesn't send out programme schedules. I really don't see the trouble of putting a sked in the same envelope.

(RHC) Convocation: International Symposium on Radio Habana Cuba's 25th Anniversary, at Havana's Convention Center, Apr 28-30, 1986; slogan: "The mass media on the threshold of the 21st century". Agenda: 1. The New International Information Order and Communications--its relation with the NIIO; --ana-

(via Ian McFarland) Effective Sun. March 30, the time of the weekend broadcasts on the RCI European Svc will be changed from 1900-2000 UTC to 2000-2100 UTC. I.e., new broadcast time for SWL DIGEST will be 2035 UTC on Saturdays. [& I believe the weekday broadcasts on the contrary move one hour earlier, to 1800 & 1900 UTC, for Europe -ghl]

SPOTLIGHT ON SCIENCE, Thurs 1910 on 17820 & 15260: Mar 13, tall buildings in big cities can make the weather around them windier and colder; Canadian experts are finding ways to counteract this; how and why does acid rain kill fish in lakes and rivers? Mar 20, millions of years ago, the world's first underwater monsters swam over what is now British Columbia; a Canadian researcher says left-handed people may have slightly better brains than right-handers. Mar 27, flying too close to an erupting volcano can be very dangerous to aircraft, but pilots often aren't warned about eruptions; a Toronto research centre is working on new gadgets to help the elderly; a piece of plastic can tell farmers how much sunlight their crops are getting.

CANADA À LA CARTE, Sat. 1800 on 17820, 15260, UTC Sun. 0100 on 9755, 5960: a 4-part series thru March 22/23, 'Searching for Atlantis'--is the lost continent all a hoax, or the result of a misreading of history? Mar 29/30, part one of a two-part documentary series on the highly emotional abortion debate in Canada--is it murder or reproductive choice? Exploring a potential meeting ground.

COAST TO COAST, Fris 1910 17820 15260, UTC Suns 0406 on 9755, 5960--regional reports: Mar 14/16, Ontario; Mar 21/23, Québec; Mar 28/30, Atlantic provinces.

SWL DIGEST, Sats 1935 on 17875 15325 11945 7235 5995; 2135 on 17820 15325 15150 11960 11945; Suns. 2305 on 11710, 9755, 930; Mons 0406 on 9755, 5960: Mar 15/16/17, science reporter Bob McDonald reports on some of the work being done at Bell-Northern Research in Ottawa on the development of artificial voices; latest DX news with gh. Mar 22/23/24, Ian talks with Michel Eric, Dir. of Business Development for Cantel, one of Canada's major cellular telephone companies, about cellular radio in Canada; gh reports the latest DX news. Mar 29/30/31, Larrys Miller & Magne join Ian for SWL Digest Forum on the future of SWBC--how long will it be before satellites take over from the usual SW transmitters?

C H I N A (Radio Beijing) Features for March, 1986 (continued from DX Listening Digest)
Thu Mar 13, CHINA IN CONSTRUCTION--In years past, foreign experts reckoned that China's land and climate were 'not suitable' for growing rubber plants. But today, of the world's 37 rubber-producing countries, China ranks fourth in area cultivated, and fifth in dried rubber production--a report on China's flourishing rubber industry.
Sat Mar 15, MUSIC FROM CHINA--born in Shanghai in 1921, flautist Lu Chunling came from a poor background. He learned to play the flute at an early age from a cobbler who lived nearby. Lu had a natural talent for the instrument and worked hard to develop it. But he had to put aside his interest in music to earn a living by riding bicycle rickshaws and working as a driver. After Liberation, Lu Chunling was given a place in the Shanghai Traditional Music Instruments Ensemble as a flute player. Now, he's an associate professor at the Shanghai Conservatory of Music. You will hear flute music played by Lu Chunling.
Sat Mar 22, CHINESE FOLKTALES--Lingdang's mother died when he was five and his father married another woman. Seven years later, his father died, too. The stepmother regarded him a thorn in her side. One day, she forced Lingdang to tend sheep in a valley where there were a lot of wolves. When he returned, the stepmother found not one sheep was missing and stranger still, Lingdang had grown taller and stronger. Lingdang told her honestly that there was a kind of fruit grown in that valley that could change people when they ate it. The next day, his stepmother picked the fruit and ate it. What happened to her? If you want to know the result, please tune in.
Thu Mar 27, CULTURE IN CHINA--the March edition of the series on contemporary Chinese literature will feature Mao Dun (Shen Yanbing), a pioneer of the modern progressive culture of China, whose masterpiece 'Midnight' has been translated into English. His story and excerpts from his works.

lysis of the flow of information; 2. The impact of new technologies on the mass media. 3. Radio broadcasting in the struggle for peace and for mutual understanding and freindship. 4. The role of amateur radio fans [sic] and DXers as backfeeders [sic] and active partners in international radio [original Spanish: El papel de los radioaficionados y radioescuchas amantes del 'diexismo', como retroalimentadores y elementos activos de la radio internacional].

Rules: 1. Participants may be representatives of nat'l and int'l institutions, whether governmental or non; experts in radio, TV, and other mass media; as well as people whose fields are related to any of the agenda points. 2. Papers presented at the symposium should be no more than 30 pages (8½ x 11 inches) typed double space. 3. Speeches at the plenary session must not exceed 20 minutes. 4. Each paper should cover only one of the agenda points although they may be presented on all points. 5. The Organizing Committee will guarantee the reproduction and distribution of the papers presented by participants ine one of the official languages of the symposium: Spanish, English, Russian, French, Portuguese. 6. The Organizing Committee will provide translation of papers that are received before March 15, 1986. 7. Workshops will be held on various themes included in the symposium agenda. 8. Participants will be expected to cover their travel expenses, lodging and meals. The Organizing Committee will guarantee transportation to and from the Convention Center. 9. The Organizing Committee will arrange lodging in Four Star hotels in Havana not exceeding $50 per day. 10. The organizing committee will make arrangements with the National Institute of Tourism for those who require lodging at more moderate prices. 11. If you want to participate in the symposium, contact the Organizing Committee before March 15, 1986: Telex 51-1613 and 51-1344. Telephone 32-0138 and 32-9850; Postal address: P O Box 7026, Havana, Cuba.

gh: Meanwhile, RHC is also running a public essay contest, "Why do you listen to RHC?", which has a deadline of April 30. Prizes are 5 trips to Cuba, all expenses paid, including July 26, for 2 weeks. Limit is 500 words, and should be accompanied by entry blank available on request.

C U R A Ç A O (James Careless, Radio Earth Canadian Bureau, Feb DX Ontario) [Careless' reports, a recent addition to Radio Earth, are among the most creative, humourous and entertaining items it carries; schedule unknown -gh] Come June, Radio Earth International will begin broadcasting to the Americas via its own transmitter in Curaçao, Netherlands Antilles. That's the latest word from Jeff White --after many years of shuttling from one station's transmitter to another, the program that 'brings the world to the world' will be a full-fledged round-the-clock operation. (Until then [and probably afterwards], Radio Earth can be heard UTC Tue.-Sat. at 0300 via WHRI on 7400.) The transmitter is currently in Benton IA, where John Gorski is modifying the TMC transmitter from a 50 kW SSB model to a 25 kW AM unit; meanwhile, in Curaçao, Radio Earth is having its license proposal considered by the Landsradio (Curaçao's version of the CRTC or FCC). Jeff White hopes to have this paperwork settled in a matter of weeks, in part because the Curaçao government wants to see an international station on the island; a station that could play a big role in promoting Curaçao to tourists throughout the Americas. On the west coast of Curaçao, in an area suitably named "Westpoint", lies what will be Radio Earth's antenna field and studio site. The array will consist of a rhombic antenna (or diamond): four towers, each 125 feet tall, set apart from each other at distances of 300 feet. This array is aligned along 340 degrees; that is, a beam whose centre will pass near Detroit MI; it's reversable to 160° for South America, passing between Buenos Aires and Rio de Janeiro. The only area that will have a hard time receiving Radio Earth will be Central America, due to the nature of shortwave 'skip'. Frequencies are still up in the air, says White. For reasons known to his engineer, the antenna's optimum performance will be on the 11 MHz band, with a beamwidth of 25°. At lower frequencies, that will increase to 45°, meaning that Radio Earth will have broad coverage in the Americas. The station looks forward to a healthy, if still uncertain, financial future. The cost of the Curaçao project, includ-

No way, Esoj; Cuba balks at odd names

By JOSE DE CORDOBA
And LOURDES MELUZA
Herald Staff Writers

It soon will be illegal for parents in Cuba to name their children after objects, animals or places, or by pulling letters out of a hat or spelling names backward.

Havana is acting to quash a growing trend among Cuban parents to give their kids unusual names, Angel Pino, press officer at the Cuban Interest Section in Washington, said Tuesday.

Many Cuban parents felt "the weirder the name, the better," said Miriam Santamaria, a former registrar at the Havana parish of San Nicolas now living in Miami. "Parents would drop letters into a hat, pick out six or eight, and that would be a name."

A trendy moniker among parents in Cuba is Odracir, or Ricardo spelled backward, she said.

Another popular practice is to combine portions of the parents' names. One child in Cuba was named Jovalsan after his father, Jose Valdes Sanpedro.

A Havana radio broadcast monitored Tuesday said parents will still have freedom to choose names for their children, as long as they abide by the limitations set by the law and do not follow "an arbitrary list of saints."

The law also will discourage parents from such flights of fancy as naming their twin daughters Biela and Propela — connecting rod and propeller in English — a Havana radio announcer said.

"No one can be registered with more than two names [and] the names must correspond to the cultural and educational development of the people and their traditions," the announcer said.

Critics were quick to criticize the law, which takes effect Jan. 1.

"Be it a biblical or Moslem name, that is a very private affair for parents," said Auxiliary Bishop Monsignor Agustin Roman in Miami. "Names should be given by parents, not governments."

Around The Americas

ing everything, comes to $120,000 US; the operating budget (on which is half a profit projected in it) for the first six months runs at $72,000. The money is being raised through the sale of stock in Radio Earth; if you've ever dreamed of belonging to an international broadcaster [or vice versa], this is definitely your chance! Much of the schedule is still under negotiation, but what follows is a tentative lineup:

2130-2230 UTC, EUROPE TODAY, David Monson of BRT fame, hosts a show tentatively headquartered in Amsterdam. 2230-0430 relays of European broadcasters, who will buy time by blocks. 0430-0530 THE WORLD --flagship program of Radio Earth, featuring reports from around the world. 0530-0630 THIS IS THE CARIBBEAN, hosted by Rudy Espinal. 0630-1130 VOICE OF THE CARIBBEAN, featuring regional news, music and entertainment. 1130-1630 relays of European broadcasters. 1630-2130 VOICE OF THE CARIBBEAN.

Jeff White hopes to expand the coverage of the world with additional bureaus. The Canadian Bureau, in Lakefield Ont, is formulating a distinctive package of Canadian news, humour and music, to be called "Cancon", short for "Canadian Content". In the future, White sees two goals: 100 kilowatt of transmitting power; and to make SW radio commercially viable without sacrificing quality programming.

E C U A D O R (via Ken MacHarg) Content of his program in English, SALUDOS AMIGOS, Sun 0800 & 1900, UTC Wed 0200 & 0630: Mar 9/11/12, music from China, Ecuador; excerpt of HCJB's first talk show; description of Columbus IN, talk on friends. Mar 16/18/19, Irish music, "Do Something Now," special record by 20 Christian artists with proceeds to Ethiopia relief; Mar 23/25/26, "America the Beautiful" and "Praise the Lord," also answering letters from listeners since this is HCJB's International Friendship Program.

G E R M A N Y W E S T (gh) DW's German program STADTBUMMEL, for a sesquihour every 5 weeks on Sundays offering a game with 100 prizes, top being a trip to Germany--has this schedule for the next few months: 6 Apr from Gütersloh, 11 May Dinkelsbühl, 15 June Baiersbronn, 20 July Stuttgart, 24 August Lübeck, 28 Sept. Freiburg. It starts half an hour into each 4-hour program rotation cycle.

H U N G A R Y (via Kraig W Krist) Now Radio Budapest is getting into the phone-in business too: for THE FLOOR IS YOURS broadcast of March 17, a discussion on the Hungarian economy, listeners were invited to phone in questions and comments between 1300 and 0100 GMT on Monday & Tuesday March 10 & 11, to (36-1)-136-847, after your access code.

March programs: the first airing is on the 0300 UTC broadcast by UTC day, and then repeated thru 0200 UTC the following day, except UTC Mon when there is no 0200 broadcast in English. Standard Features: Mons SPORTS PANORAMA, Thurs CHOICE, Sats PLAYBACK, Suns DX (with DX specials on Tues & Fris). MAGAZINE 90--rapid requests, fast facts, and DX tips, on Mon Mar 10 & Wed Mar 19; Mon Mar 24 & Wed Apr 2. H.P.R.-press review and economic news: Fri Mar 7 & Tue Mar 11, Fri Mar 21 & Tue Mar 25.

REPORTS: Halley's Return--Fri Mar 14 & Tue Mar 18. World Cup Prospects--Fri Mar 28 & Tue Apr 1. WHAT YOU SAY--Mon Mar 3 & Wed Mar 12. FLOOR IS YOURS--economics--Mon Mar 17 & Wed Mar 26. WHO IS? WHAT IS? on horse racing--Mon Mar 31 & Wed Apr 9. GUEST SPOT--Depeche Mode (rock) Sun Mar 9; Lamberto Gardelli, conductor on Sun Mar 23. MUSIC ON DEMAND--Zoltan Kocsis on Liszt Sun Mar 16; The World's Most Beautiful Score on Sun Mar 30. [still needlessly complex and confusing arrangement -gh]

I R A Q (Andy Sennitt, Denmark) Baghdad has increased its English rpogramme to 2 hours, but apparently there is no increase in content. They just pad it out with a lot of extra music. The opening sequence comprising frequency announcements and programme preview takes all of 10 minutes, and from what I have heard of the rest of the broadcast, it's all taken at a very leisurely pace. Also, I noted them closing as early as 2148 on 7170, nominally 2200. I suppose the transmitter comes up on another frequency at 2200, but even so I think they are struggling to fill the two hours.

I R E L A N D (Andy Sennitt, Denmark) RTE is celebrating its 60th anniversary this year. They've been running a series of programmes at 2100-2200 Sundays on 567 kHz, each dealing with a specific aspect of the history of Irish broadcasting. I was amused to note on the Feb 2 broadcast that 'jazz' (which in this context included big band swing music) was banned from Radio Eireann before the 1960s apparently on moral grounds. Unfortunately, reception in Denmark is rather poor due to QRM from Sender Freies Berlin; otherwise I would have recorded this.

J A P A N (via Bruce MacGibbon, SPEEDXGRAM Ed./Pub.) Radio Japan English programs for March; RS1= regional services for America & Oceania; RS2 = other regional services; GS1 = general service at 13, 15 and 23 UTC; GS2 = 05 & 07 UTC. CROSSCURRENTS Mon GS1/2, RS1/2--how should we discipline our children? JAPAN TRAVELOGUE Mon GS1/2, RS1: 2nd week [Mar 10] in the steps of the pilgrims - Shikoku; 3 sea of fish cultivation--Uwakai, 4 island of Ryukyu culture--Okinawa, 5 a coral island under threat--Ishigaki. SPECTRUM Tue GS1: 2 Japanese designers and international men's fashion, 3 new Japanese commercials--from fantasy to everyday, 4 the English cram school boom, 5 Japan's professional orchestras.

RADIO JAPAN JOURNAL Wed GS1/2, RS1: 2 equal opportunities law, 3 freedom of the air, 5 from home ownership to rented accomodation. SCIENCE TODAY Wed GS2/RS2/Thu RS1: 2 home automation, 3 new applications for supersonic microscopes, 4 new dry batteries. ONE IN A HUNDRED MILLION Wed GS1, Thu GS2, Fri RS1: 2 dollar market watcher, Misuzu Sato (46), international exchange dealer, 3 mother to ex-

change students from the developing world - Eiko Sato (52), cafeteria proprietress; 4 I cured my wife's paralysis by Chinese medicine - Koichi Ishii (32), ex-pro-diver. 5 a Japanese restaurant in Melbourne - Ichiro Furuhashi (42).

OUR HERITAGE on Meiji Period and its Culture, Sun GS1, Tue GS2, RS1: 2 Working women--the crucial rule played by female labor in textile workshops, one of the most important industries in Japan's early industrial era; lecturer is again Ms Hideko Maruoka. 3, the Japanese of 100 Years Ago--for the last of this series on the Meiji era, author Ryotaro Shiba reviews cultural developments of the period 4, Japan as I see it--my love movies--young movie director Yoshimitsu Morita; 5 Japan As I See It, the heart of the Japanese, Donald Richie.

JAPAN PANORAMA, Thu GS1, Fri RS2, Sat European: 2 tax--economic affairs commentator Takashi Inoue; 3 Visiting graves, Taisho University Prof. Masao Fujii; 4 instant Ramen--Mukogawa Women's Junior College Life Science Prof Shigero Otsuka. ECONOMIC NEWS & VIEWS, Fri RS1, Eu, GS1/2-- 2 flourishing post-retirement businesses; 3 impact of Japan's 50 gigadollar trade surplus with the US--how to reduce trade frixion. VIEWPOINT Fri GS2: 2 female power for the economy--Ichiko Ishihara (62), managing director at Takashimaya Dept Store; 3 urging retirees to utilize their skills overseas--Takeshi Watanabe (73), ex-Asian Development Bank pres; 4 a homecoming for the children of Japanese war orphans from China--pres of Reitaku Univ, Sentaro Hiroike; 5 internationalizing flower show, pres of Komatsu Ltd. Ryoichi Kawai (68).

ASIA NOW, Thu= GS1/2, RS1/2--2 first Asian winter games; 3 living in Burma. ASIA NOW Sat GS 1/2--2 NHK correspondents' reports.

Special programs: MANPOWER TRAINING AND NATION BUILDING in GS1/2, RS 1/2: March 22 Prologue--the Asian region; Mar 26 teaching the children--Bangladesh; Mar 27 training in skills--the Philippines; Mar 28 Rice for tomorrow--Thailand; Mar 29 fish farming--Fiji; Apr 2 a return to paradise--Tonga; Apr 3 fighting volcanic mud flows--Indonesia; Apr 4 reforesting--Indonesia; Apr 5, the high-tech ventures--Pakistan. FROM MATERIALS TO PEOPLE, epilogue of these will be broadcast on or after April 7.

M86 frequencies include: Regional services: 0845-0945 Au/NZ 11875; 0015-0115 NAm 11870; 0200-0300 N&C&SAm/Haw 11870 15195. General services: 0500 on 17810 9735; 0700 on 17810 5990 11955 15230=Gabon; 1300 on 11815 7250 5990; 1500 on 11815 5990 15310=Gabon; 2300 on 15195 9675 15235 15420 and from Apr 1 9645=Gabon.

NETHERLANDS (via Dick Rush, Oak Ridge TN) Radio Netherlands is restructuring itself along target areas, rather than along language groups. During March, Asian broadcasts at 0830, 1130 and 1430 carry "The best of MAINSTREAM ASIA". MEDIA NETWORK topics on Thursdays: Mar 13 communications with the comet, the GIOTTO mission; African DX news from Ginbey. Mar 20 Aruba Arrives, a look at the new radio nation. Mar 27 back to the beginning--sorting out the sun, plus Goonetilleke with Asian DX news; Apr 3, India: video or radio?--there's a lot of SWL in India, but why are receivers on the market lacking in quality found elsewhere? the threat of TV. Apr 10 catching up on intl broadcasting news with Ginbey, Africa; John Campbell. Apr 17 behind these walls--prison radio in Holland; Andy Sennitt DX news. Apr 24, pirate radio in Amsterdam; Goonetilleke Asian DX news.

PHILIPPINES (gh) In the Feb. 24 NY Times (via Tom McKeon) Francis X Clines reports that shortly before Marcos fell, four gunmen riddled the four 100 kW transmitters of Radio Veritas with bullets, at 2100 UTC Feb. 22. Veritas was the main station identified with Aquino and the opposition. The damage immediately put the station off the air; estimated $1.8 million damage will take six months to a year to repair. Despite heavy monitoring of US radio & TV coverage of the transition period, I never heard any mention whatsoever of this event....

SOUTH AFRICA (Woody Seymour, Sanford NC, Feb SPEEDX Program Panorama) I listened to most of Radio RSA's call-in program on Dec. 31, from 2200 on 9615 which was excellent. Apparently, South Africa's much-publicized problems of 1985 did not deter people from phoning in New Year's greetings. The vast majority of calls came from the USA, but Canada had quite a few, and Scotland and Ireland were represented also. People such as Harold Sellers, Tim Hendel and Duke Alexander participated. Colin Miller and Pieter Martins of Radio RSA phoned in as well. The most interesting call, however, was a wrong number answered by host Colin Houston. The caller identified himself as a newspaperman who was initially surprised to find himself live on international radio. He proceeded to make some political statements aimed at Western media and critics of South Africa. When he got carried away and uttered some salty language, he was cut off! The hosts were prepared to end the program early when calls began to slow down after 0000, but then the pace picked up and they were able to stay on almost until 0200. It was a very interesting program. The regular transmission UTC Jan 1 consisted of THE YEAR IN RETROSPECT. In past years, this has looked at the past year in news, sports and entertainment but this time it consisted of a lengthy defence of the policies of the SA government in 1985.

UKOGBANI (March London Calling) BBC programme previews for March: Features:

THE STAR WARS HISTORY, five programmes tracing the evolution of the American nuclear debate, Suns 1915, Mons 0101, Fris 1515: 2nd Disillusion with Defence: the Mortification of McNamara; 9th Deterrence through Detente: the Hand of Henry Kissinger; 16th Red Alert: Paul Nitze and the present danger; 23rd Jimmy Carter: retreat from assured destruction; 30th Defence in Space: the president moves the

goalposts. PEACEFUL SOLUTIONS, as 1986 is the UN International Year of Peace, 4 case studies starting with Hong Kong, from 30th, Suns 2330, Mons 0630, 1001, 1515.

TRANSATLANTIC QUIZ, Irene Thomas & John Julius Norwich in Britain; Shana Alexander and Brendan Gill in the U.S., Sats 0330, Mons 1215, 2330, Weds 0830.

PROSTITUTES, in Britain, possible changes in laws, 23rd 1615, 25th 1215, 2330, 27th 0330.

WHAT MAKES WASHINGTON TICK? An investigation by Alastair Lack, 23rd 2330, 24th 0630, 1001, 1515.

THE WIND DOTH BLOW, physiological effects on humans, 16th 1615, 18th 1215, 2330, 20th 0330.

GOOD FRIDAY MEDITATION, 28th 1030 & 1830. IN HOLY CONTEMPLATION, more on Lenten centres, Sats until 15th 2101, Suns 0945, Weds 1515, Fris 0530.

JUST LIKE YOU AND ME, on humans & animals, Mons until 17th 0445, Tues 2101, Weds 1115.

MERIDIAN IN NEW YORK, on theatre, books, music, visual arts, 18th, 20th and 22nd; among three editions weekly, Sats, Weds, Fris 0630 & 1130, Suns, Tues, Thurs 1715.

THE MIND IN FOCUS, current thinking in psychology, Suns until 16th 2330, Mons 0630, 1001, 1515--16th on Memory. I WISH I'D MET... Mons until 24th 1115, Tues 0815, Fris 0215--writers and broadcasters choose a subject, including Mozart and Khrushchov.

ORIANA, aboard the cruise liner in the Pacific, 24th 0445, 25th 2101, 26th 1115.

GIOTTO SPACECRAFT MEETS HALLEY'S COMET--BBCWS operates a special studio to report at intervals from approximately 1900 on the 13th to 0100 on the 14th.

THE WORLD'S MOST SUCCESSFUL VIRUS--the common cold, 9th 1615, 11th 1215, 2330, 13th 0330.

BYWAYS OF HISTORY from 22nd Sats 2101, Suns 0945, Weds 1515, Fris 0530: 22nd, the Greeks in Search of Happiness; 29th, Medicine in Ancient Rome. ASSIGNMENT, Weds 2030, Thurs 0230, 1130, 1615, sometime during March reports from along the Iron Curtain, assessing its strength.

MUSIC: THE MUSIC OF RICHARD RODNEY BENNETT--from Concert Hall to Cabaret, four conversations from 11th Tues 0830, Fris 0230, 2330. A BENNETT PREMIERE of Love Songs, settings of poems by e.e. cummings, live on the 11th at 2030; also on program: Respighi's The Pines of Rome.

CONCERT HALL: Shostakovich Symphony No. 12, 30th 1515, Apr 1 2115. INTERNATIONAL RECITAL, live Suns 1515, repeated Tues 2115--16th Angela Hewitt, Canadian pianist playing Bach, Ravel, Albeniz; 23rd soprano Emma Kirkby with English lutesongs of the Tudor period by Henry VIII, Dowland, etc.

EASTER SERVICE from St Jame's Church, 30th 1030, 31st 0030.

HITSVILLE USA, five more instalments of the 20-part history of Motown--1970 to 1973, Sats 2330, Suns 1830, Mons 1030. GUITAR INTERLUDE starting with Segovia, from 15th, Sats 0945, Mons 1630, 2115, Weds 0215. SPORT Cambridge v Oxford boat rowing race, in SATURDAY SPECIAL 29th 1515.

DRAMA: PLAY OF THE WEEK: Brief Encounter, by Noël Coward, 1st 1901, 2nd 0101 & 1201; Orlando by Virginia Woolf, 8th 1830, 9th 0030 & 1130. The Death of Grass, by John Christopher, SF story after-the-virus, 15th 1901, 20th 0101 & 1201. Dear Janet Rosenberg, Dear Mr Kooning, by Stanley Eveling, 22nd 1901, 23rd 0101 & 1201.

221B, by M J Read, a post-mortem tribute by Dr Watson to Sherlock Holmes, 29th 1901, 30th 0101 1201

SHORT STORY, Suns 1001 & 2101, Tues 0130--16th An Afternoon on the Lake, by Craig Eckberg, a listener in Minnesota; 23rd News of the Engagement, by well-known British writer Arnold Bennett.

BEHIND THE CREDITS, interviews with producer, screenwriter, cameraman, editor, distributor, in the British film industry, from 31st, Mons 1615 & 2315, Tues 0145 & 0730.

LIFE WITH THE LID OFF, recollections of Irish novelist Elizabeth Bowen--30th 1615, Apr 1 1215, 2330 & 3rd 0330.

THE HEAT OF THE DAY, by Elizabeth Bowen, abridged in 15 parts, from 31st Mons 0430, 0815, Fris 2145

PRIDE & PREJUDICE by Jane Austen continues 12-part dramatisation, Suns 1430, Mons 1830, Tues 1030, Weds 0230. BREAKFAST AT TIFFANY'S by Truman Capote, 7-part abridgement continues, Suns 0215, 2209, Mons 1445, Fris 0945.

MY COUNTRY IN MIND, more interviews with expatriate writers, Mons 1615, 2315, Tues 0145, 0730.

U S A (VOA Voice) WORLDWIDE SHORTWAVE SPECTRUM, Thu Mar 13 on FM and TV transmissions and DX. After that, it moves to a new day and time, the last 13 mins of the Tuesday MAGAZINE SHOWS, i.e. 1347, 1747, GMT Wed 0247. After all this time, it's still only a program-within-a-program, tsk tsk.

WEEKEND, Sat Mar 22 on the rites of the arrival of springtime. NEW HORIZONS, Sundays on 'strange matter' and interstellar travel. In Special English, PEOPLE IN AMERICA, Sundays thru Mar, on Ernest Hemingway's life. AMERICAN MOSAIC, Fridays on what's happening in the U.S.--student life, movies, records, sports, humor, books, and more [Yes, there is a bit more happening than the subjects mentd -gh]

FOCUS, on the first Friday of every other month beginning Feb 7 (e.g. Apr 4), some aspect of the U.S. Constitution. AFRICAN PANORAMA, Fri Mar 21 on the Sharpeville Massacre 26th anniversary.

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MEDIA FILE ON INTERNATIONAL BROADCASTERS

The following transcript is taken from one edition of a regular weekly program entitled MEDIA FILE, produced and broadcast by the CBC domestic service on January 14, 1986. It examines the modus operandi of the news services of three major, Western international broadcasters. Any comment in parentheses is from the transcriber, John Grimley of Toronto, himself a shortwave listener. This transcript is submitted for publication in RIB with the written permission of CBC Radio News, from the program's producer, Stu Allen.

Good evening, I'm Vince Carlin (1). Tonight, international broadcasting services. Factual and fair? Or propaganda tools? Voice of America, Radio Canada International and the BBC World Service all have one thing in common. Their services are funded by governments. Some people suggest what they broadcast simply isn't news.

A lot of money, a lot of people and a lot of headaches. In one sense, that's perhaps the best way to describe international news services. For the most part they are broadcasting outlets funded by governments that direct their signals to the world, not to the country they originate in. Over the years there's been a perception that such international agencies are propaganda tools; that they act as a voice for the government that funds them.

On our program tonight we'll examine three such services - the Voice of America, the BBC World Service and Radio Canada International. All three are similar, but different. We'll talk to people from each about those similarities and the differences. First, though, let's listen to what they do. To give you a chance to compare the three we've recorded the major English language newscasts broadcast to Western Europe on either January the 8th or the 9th. We've also selected one story - Libya - to play back.

(Lady's voice with U.S. accent) (2) It's eleven hours, Greenwich Mean Time and here is the news from the Voice of America. (brief Yankee Doodle theme) I'm Susan Yakki (sp?) in Washington.

(1) The Voice of America. Their story deals with statements from both Libya and the United States. Listen to the way the reader points out the difference between facts which have been confirmed and those which are only reported or apparent.

(2) Libya says it expects an attack sometime this week and has put its armed forces on alert. Most of the Libyan capital of Tripoli was reportedly blacked out Monday night; an apparent effort to foil any air attack. An aid to Libyan leader Muammar Kadaffi, predicts an attack most likely would come from Israel with logistical support from the United States. The Libyan news agency reported that Israeli jet fighters were aboard a U.S. aircraft carrier in the Mediterranean, an assertion U.S. Navy sources in Washington immediately dismissed as ridiculous. The United States and Israel have accused Libya of supporting the Palestinian faction that claimed responsibility for the terrorist attacks on the Rome and Vienna airports last month, that resulted in the deaths of nineteen people.

(1) Now, across the Atlantic to the BBC.

(Time pips) (U.K. male voice) Six hours, Greenwich Mean Time. (Second U.K. male voice) (3) BBC World Service presents Newsdesk. The world news, read by John Stone.

(1) As was the case with the Voice of America report, statements from both sides are reported. The major difference in this story is that all the statements and claims are attributed.

(3) President Reagan, following his decision to halt all business dealings with Libya, has now ordered all Libyan Government assets in the United States to be frozen. The order became effective immediately. A senior American official said the freezing of the assets would involve hundreds of millions of dollars and was undertaken as a precaution against Libyan action that would place in jeopardy United States assets in Libya. Libyan television said Colonel Kadaffi spoke to the diplomats about Arab-European interests and the need for security and peace and stability in the Mediterranean.

(1) Finally, to Montreal and the CBC's international service.

(Lady with Canadian accent) (4) On tonight's program, following the news, Canada-U.S. trade and foreign policy in general for 1986 and beyond. We report on Provincial-Federal relations on the issue of free trade with the United States and a political observer in Ottawa will comment on the Federal Government's position. (Tape edit evident here) These stories and others coming up shortly, but first the news with Bob Cadman.

(1) Radio Canada International was the only international service that did not make the Libyan story the lead item, the first story to be reported. RCI, like the Voice of America, quotes officials and western analysts, with no attempt at suggesting who these sources may be.

(Male voice with Canadian accent) (5) United States President, Ronald Reagan, is expected to announce a package of economic sanctions against Libya, in response to Libya's alleged support for terrorists who attacked the Rome and Vienna airports last month. Nineteen people, including five Americans, died in the attack. Officials in Washington have refused to predict what kind of sanctions Mr. Reagan will propose at a news conference later today. But Western analysts say that Washington has little economic leverage left, since it has already cut most trade with Libya in 1982. They also cite the danger of Libya's retaliation against U.S. citizens who work there. It's expected that Mr. Reagan will try to enlist his European Allies in his attempt to isolate Libya, economically. But Western an-

alysts suggest that it is unlikely that he'll succeed; Washington's allies are reluctant to impose sanctions, largely because of economic self-interest.

(1) To find out a little more about each of these international services, we've invited the people in charge to talk with us. I should point out that all three services do a lot more than just the news. But for the purposes of our show, we'll concentrate on just that part of the programming day. Ed deFontaine is Director of News for the Voice of America. He's in our Washington studio. Mr. deFontaine, could you give us a brief history of VOA?

(deFontaine) (6) Well, the Voice of America was started actually er during the er Second World War and er it originally broadcast er with some shortwave transmitters, to the best of my knowledge, I believe owned by RCA and er it was, in fact, basically er a service aimed to counter propaganda and to tell er the Germans about the war effort.

(1) Now coming to the post-war period, can you tell us a little bit about the reconstitution of the Voice of America?

(6) Well, the Voice of America, as far as programming today is concerned, is governed by a charter which was promulgated in 1975 by er then President er Gerald Ford and er then Senator from Illinois Charles Percy and several other senators who cooperated in this venture and they set up a charter for the Voice of America, which requires that it do three things.

Number 1, to present factual, comprehensive, unbiased news and Number 2, to tell about America and its institutions; in other words, how the country works and what makes it tick and Number 3, to, in fact, er explain and present the foreign policy of the United States of America or of the administration in power at that time. And you might say that numbers 1 and 3 don't necessarily always go together. But er the way we do that is to have editorials which are written by a separate department and which do reflect the - the policies of the administration in power and they are kept separate from the information programming which is produced by the rest of the organization. Er in this way the er the Administration in power has its commercial on the Voice of America to accomplish the third portion of that charter, without interfering with Number 1 or even Number 2.

(1) Can you tell us about that - that kind of uneasy mix?

(6) Well, as I said there - there is a policy department and er it is, in fact, staffed by people who er; Number 1, there are policy officers from the U.S. Information Agency er who are not at all bound by the other portions of the charter. Their obligation is to explain the foreign policy of the United States and to put its best foot forward.

(1) Let's talk about the - the first er portion of that er that mandate, the - the news service. When you're generating that news service, for who are you reporting and writing?

(6) We are reporting for a world wide audience and English is the language in which the news service is written; it's the lingua-franca(?) for the rest of the organization, the other 41 languages which broadcast er over the Voice of America. Er we are creating material which will be of interest - which will have an impact on er - overseas audiences. Er we do not ignore American news, but er it is just a fact oflife that an overseas audience is not as interested in an American income tax development as it is the development of the I.M.F., which might control the amount of money which is er either lent or granted to it, er or policies which would affect its trade.

(1) Can you tell me how the staff is - is greeted overseas? I noticed you had a correspondent in Beijing, for instance. Are they viewed as independent reporters or is there a tendency to view them as agents of the U.S. government?

(6) I believe that now er they are accepted as bona fide journalists. Er, this - this charter that I mentioned is only er a little over ten years old now and before that there was some questioning of exactly er what a correspondent from the Voice of America was all about. It is so important that credibility be maintained, because if the audience finds out that it has not received er the correct information from the Voice of America - even if it's not our fault -, but if that - if that feeling is left with the audience, then part of our credibility is gone, and perhaps they won't be listening to us next week; which is exactly what we want to do to build our audience and to let them know that they're getting an honest job from serious er journalists, who er er are devoted to - to their jobs.

(1) What's the audience like? How - how big is it and - and where are the largest concentrations of listeners?

(6) Well, the audience is estimated, and it is an estimate, at one hundred twenty million; and it's probably a low estimate er because there are indications that there are many, many more millions listening in China than we have had any chance to survey up to now. Er, the amount of interest which is paid by the Chinese to the Voice of America - what we call Special English, or slowly read, limited vocabulary English for English learning - is - is far greater than er had been estimated, according to just the indications that we get from travellers to the area. Er, this audience is as diverse as the people who have to listen very surreptitiously in some areas, mainly er the Soviet Union and parts of er Eastern Europe, to people who listen very openly in Africa and Latin America, to gain American flavour or er to gain information which might not be expressed as fully on their own stations.

(1) I'd like to talk just er briefly about the future; er the CBC's arm, our Radio Canada International, has been - had its budget cut; er the BBC has had some difficulties in recent er years, but I

gather that's not the case at Voice of America.

(6) Well, it- it's not the case at the Voice of America as far as the Administration's support er of the program. President Reagan, and I must say without any tendency to interfere in the programming er has, in fact supported the Voice er er quite - quite generously; and recognising the fact that the physical plant was quite run down over years of er of just not putting enough capital into the transmitting equipment and the studio equipment, er he has recognised the value of er the radio service. We are facing the possibility of some cutback at the moment but only to the extent that every other government agency would under the Gramm-Rudman-Hollings bill -

(1) That's the bill that er that er declares that you have to have a balanced budget.

(6) That's right, by, by er 1991, I believe, if I am correct in that - that final year.

(1) OK, Ed er deFontaine, thank you very much.

(6) Well, it's been a pleasure to talk to you and we're always willing to er, er spread the word for what we think is a good service.

(1) Terry Harron is editor of the External Service news department in the British Broadcasting Corporation. Mr Harron is in our London studio. What's the objective of the BBC World Service?

(7) I think to su-, put it quite briefly, it's to provide a service of impartial and accurate news, er bearing in mind our reputation for objectivity we've built up over the years and we're most anxious to preserve it. I think that is the basic aim of the World Service.

(1) When was it set up in its current form?

(7) Well, the World Service goes back to the old Empire Service of the BBC, which was started in 1932, and that was then designed um as a a news er station for expatriate Brits overseas. Er, we've now changed that perception, of course. Um, we no longer regard British expatriates as the main target. Er we broadcast er mainly to people who have English as their second language.

(1) Er, who, exactly er listens to the broadcasts; er, where are they?

(7) Well, all over the world; we have er something like a hundred and twenty million listeners; and the listeners go right across the - the spectrum. Presidents and Prime Ministers listen. We - we know that because from time to time they ring us up to complain at something we've done. And, of course, the um, the Bombay taxi driver has to appear somewhere in this; er, lots of peasants. Er, in Somalia, in particular, um, we have a colossal audience there and er at er half past five in the afternoon in Somalia, the whole country comes to a halt while they listen to the BBC Somali Service. I - I've been there and watched this; it's really quite extraordinary.

(1) Can you give us some examples of people who've called up to complain about what they've heard on the World Service?

(7) Yes, there was one president - I - I don't think I'll name him - but he was from Africa and he telephoned the newsroom one evening to complain that we'd given rather short shrift to a speech he'd made earlier in the day. He thought we should have run it at much greater length. We had to explain to him that news er has to compete with other news stories from all over the world. In the end, I think he was satisfied.

(1) Now, a constant concern for anyone who works for a Crown corporation, as the CBC is, as the BBC is, is government interference; either the actual interference or the potential for interference. Can you tell us about the relationship between the government in Britain and the BBC World Service?

(7) Yes, er I do find it er sometimes difficult to explain to - to visitors to the BBC that, altho er the External Services are funded by the government, in fact the government exercises no editorial control whatsoever. Er, the Foreign Office does have the power to tell us which languages we broadcast in and for how many hours we broadcast in those languages. But beyond that, there is no attempt to interfere whatseever.

(1) Has there never been a case of the government interfering with the World Service's operations?

(7) No; they - they did try, and I must go back now to 1956 at the time of Suez, er when the BBC World Service er was reflecting, in its usual er objective and impartial way, the division of opinion within this country about the Suez intervention. Er and we were quoting newspaper comments in our program, er about the press, editorials and so on, er which showed that there was a deep division. And the government got extremely angry and accused us of stabbing our troops in the back er by - by telling them that in fact they were on a - a worthless escapade. Er it got to the point where Eden threatened to shut us down. That's Sir Anthony Eden who was then Prime Minister. But we refused to give way and in the end we won and I think the gov-- all governments learn a lesson from that.

(1) Now I was going to talk about the Falklands War...

(7) Yeh, I was going to come to that. The Falklands was a slightly different er issue. The Falklands was indeed a war. Er and er I think that any broadcasting station would have to accept censorship er in - in conditions of war. And, indeed, we were censored, or on the ground that it makes little - there is little point in giving information to the enemy which could result in er in the loss of lives of British troops. But the government didn't think the BBC went far enough in supporting the cause; and indeed we were asked er, indeed we were criticized at one stage, by the Prime Minister, for not referring to "our" troops in the Falklands. And the reply was, "the BBC doesn't have any troops". That didn't go down very well.

(1) Are there any comparisons to be made between the Voice of America and the BBC World Service?

(7) So far as the news output is concerned, there - there is not a lot of difference between the VOA and the World Service. I think such differences as there are lie in the field of current affairs. Er, we are not required um to - to broadcast programs about government policy, which I understand the er VOA is.

(1) What about the future of the World Service. The last report we saw here, some time back I would admit, was that there was a major cutback in funding.

(7) Yes, we were cut back in 1981. We lost three language services er which later Lord Carrington er admitted er was a mistake - had been a mistake, totally counter-productive. The total saving was one hundred and fifty million pounds, er, which he said, er was rather silly, did far more damage than it was worth.

(1) Er was the money restored?

(7) No, but at the same time the government announced - and I must be quite fair about this - that the BBC were to be given one hundred million pounds to spend over the next ten years in improving audibility; which means we're able to um we are in process of building relay stations in Hong Kong and in the Seychelles and upgrading our transmitters in the United Kingdom.

(1) OK, Mr Harron, thank you very much. I appreciate your time.

(7) That's a pleasure.

(1) Radio Canada International is headquartered in Montreal. Alan Familiant is the service's program director. Mr Familiant, what's the history of RCI?

(8) RCI celebrated its fortieth birthday er last February. So we really began in 1945 during er, towards the end of the Second World War. Er it began, I think, as a war effort with the British Broadcasting Corporation, the BBC, seeking some kind of assistance from Canada for external broadcasts. And the rest is history, we really began 40 years ago. Its objectives, simply, are to make Canada known to an international audience around the world.

(1) Now, within that international audience, er who are you programming to when you're creating programs? Who do you keep in mind?

(8) We keep in mind the - the international listener who would obviously have to tune in and be interested in Canada, er in all our target areas, which are Eastern Europe, Latin America, Caribbean, Africa, Western Europe and U.S.A.

(1) Now, RCI is, administratively, part of the CBC but does it have a separate mandate of some kind from the External Affairs Department?

(8) No, it doesn't. It's part of the CBC er I think we should clarify the - our relationship with External Affairs immediately, because that is always the bugaboo.

(1) Hm-hm.

(8) Er, we have a simple relationship with External Affairs which is a consultative one and the only relationship we have with them is they advise us on target areas and languages. And that's it.

(1) Now in er another international broadcasting outfit, the Voice of America, outside of their regular news programing and their current affairs programming, they're mandated, I believe, to present a fairly positive image of the United States. Does RCI have any similar mandate?

(8) Absolutely not. RCI's mandate is er the same as the CBC's mandate. Er our journalistic policy is based on the CBC's journalistic policy with some slight er alterations particular to international broadcasting and we present Canada as it is, warts and all.

(1) What would some of those alterations be?

(8) Simply, one of the basic er change er er major change from CBC Domestic is we make two assumptions. One, that the listener knows nothing about Canada, which means we have to background and explain every single news story. And secondly, we have a policy that we balance story within the same broadcast because another premise we operate on is that a new listener is on every day. So we operate - we don't balance something within a week or the same day or month; it's within that same half-hour block that we've got to present both points of view.

(1) RCI is waiting to hear about possible cutbacks in the future. I know it's been er cut in the previous er go-rounds. What's your feeling? Er does the future look er dim for Radio Canada International?

(8) I hope not. I - RCI had a mjaor cut in '78 and we had a cut when everybody else did er last year. We have still managed to maintain all our programming and I think time will tell. We - we feel that RCI is getting stronger. I - I don't seem to - I don't see any reason to worry.

(1) Mr Familiant, thank you. [MEDIA FILE appears Tuesdays at 7:30 pm local on CBC Radio -gh]

- - - -

you have only skimmed the surface of what is a major, international subject.

2. Why VOA,BBC and RCI? You have chosen three broadcasters from major, advanced, Western countries --I would dearly like to hear the equivalent interviews with representatives from small, third world and Eastern Bloc countries. I venture to suggest that the responses to your questions (if you were allowed to put them) would be totally different and would provoke very different reactions in your listeners. Perhaps consideration could be given to a sequel? If you do, consider also an interview with Betty Zimmerman, head of RCI; she has some very stimulating ideas about the role of international broadcasting. I am guessing, but I imagine that you chose the above three broadcasters because: a) they speak English; b) they are easily accessed; c) the CBC has good quality audio recordings of their shortwave broadcasts, suitable for rebroadcast.

3. Generally correct impression. Given the limitations outlined above (can you not get your new and successful show extended to 60 minutes? Let's not tell Ms Gabereau!), I think you provided a representative picture of the news broadcasting policies of each of the three participants and are to be congratulated on broaching the subject. But don't you know of Radio Martí? It's an arm of VOA (they say it isn't) which broadcasts blatant propaganda in Spanish, interspersed with Western pop music, from U.S.A. to Cuba and Central America. Also, as a follow up to the BBC representative who was discussing the Falklands war, the British government actually took over their relay transmitters on Ascension Island in the South Atlantic to broadcast its own propaganda to Argentine troops. Needless to say, the BBC was quick to point out that it was not they who were originating this material! I suspect that the interview with the BBC representative might have taken place earlier in 1985, since no mention was made of the one-day strike by British broadcast news journalists over the British government's attempt to ban the broadcast of a program on the Northern Ireland question - you may recall it. This is still another thwarted attempt by that government to influence the BBC's deserved impartiality

As for RCI, I believe that the general timidness and parochial approach that the government of Canada usually takes on matters of foreign affairs and policy is well echoed in RCI's editorial material and mode of delivery. I think that came through in what the RCI interviewee said.

I am most delighted that someone within the domestic media has actually acknowledged the existence of RCI and the others. I am constantly at a loss to know why media people know (or care) very little about what their cousins in the international broadcasting arena are doing. I am willing to wager that if I asked 10 people in Toronto who Ian McFarland is, none of them would know. Yet, in terms of audience listenership, more people world-wide know of him than of Knowlton Nash!

It always seems to come down to one thing (as you reported), money, or rather the lack of it. But the potential scope of international shortwave broadcasting is vast in terms of what it can do for a country. Just look at the reputation abroad that the BBC helps to maintain for the British.

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radio eqvipment forum

For example, Khabarovsk, Siberia, can be brought in on both the T.R.F. and superhet- erodyne sets, [illegible] the signal [illegible] with the signal [illegible] same station is received clearly and distinctly [illegible] a surprising low noise-level. Again, two-way conversation has been held, using this receiver, with Japanese amateurs

CONDUCTED BY LOREN COX, JR 1106 CLEVELAND AVE LEXINGTON, KY 40505

THE VOYAGER II SPACECRAFT, which closely encountered the planet Uranus on 24/1/86, radiated its radio transmissions on frequencies in the S Band (2.6-3.95 GHz) and the X Band (8.2-12.4 GHz). (Sorry, prospective DXers of the outer reaches of the Solar System, I don't have the exact frequencies - which, of course, are Dopplar shifted.) According to a chart on the screen - a chart being used by a member of the Radio Imaging Team in regard to the Atmosphere (Uranian) Occultation Test - the ground receivers, using the SS43 antenna in Australia, appear to have noise floors (minimum discernable signal) of -180 dbm on the S Band and -170 dbm on the X Band. The signal dropped below the receivers' noise floors for two periods, each of about 10 minutes' duration, at equivalent depths in the atmosphere. The existence of an ionosphere was confirmed. A radio signal requires about 2½ hours to make the Uranus-Earth trip. We normally think of radio waves as spanning space and not of the time required to do so.

Mark L. Williams, ID: What I know about the technical side of radio can be stuffed into a gnat's navel w/ room left over for a terrorist's brain. Against the recommendation of some more knowledgable people, I bought a Yaesu FRA-7700 Active Antenna and had it modified by a local for use w/ my DX-400. The thing is attached w/ alligator clips to the external ant. and ground terminals on the back of the 400, and it makes a big difference in both sig. strength and sound quality!

The other evening, I attempted to get BRT on 5910 but was disappointed by the signal. Yaesu suggests that when the TUNING control brings a peak signal on the ((can't determine word here)) "occurs at either the fully clockwise or counter-clockwise positions...Set the bandswitch to an adjacent position" and re-tune the 7700. Peak sig. for BRT (such as it was) did not come anywhere near either extremity, but - on a whim - I switched the band selector from 5-12 MHz to 2-5 MHz and re-tuned. Bingo! SIO 444!

Haven't had occasion to try this on other freqs., but it has made a world of difference for 5910.

Another performance note about the DX-400:

Have noticed that reception below 1000 kHz is far superior on my Panasonic RF-2200 on DC than on the DX-400 on AC w/ or w/o the FRA-7700 tied in. In nearly every other respect, I am extremely pleased w/ the Realistic DX-400-Yaesu FRA-7700 Act. Ant. combo.

Evidently, Mark, the FRA-7700 was producing a better match to your receiver for 5910 kHz reception in the "2-5" MHz position. Not unusual with devices of this sort. Being relatively broad banded, the band ranges indicated on the band switch are only approximate; also variations in the L/C ratio in the Yaesu device's tuned circuit could account for the seeming anomaly you describe: the circuit may be more efficient at 5910 kHz on the 2-5 MHz band than on the 5-12 MHz band. The proper use of any piece of equipment is that which produces the best effect.

The RF-2200 was the first solid-state portable with SW coverage I ever used that merited being called a RADIO. It offered superior performance to Panasonic's other portables, the RF-2600, RF-2800 and RF-2900, lacking the digital frequency presentation available on those three units. Medium wave performance, with the directional antenna, was very good. The 2200, if it is yet on the market, would still be the best non-synthesized portable around, a fine radio for broadcast listening and casual SWLing. Good sensitivity, adequate selectivity for these purposes.

Michael Harla, NJ: My orientation to SW is active but non-specialist. I'll occasionally listen to a station deep in the noise for an ID or even a QSL, but basically I listen to programs. Likewise, though I've taken the trouble to pick up some technical knowledge and have a good radio, I've had much pleasurable listening using portables, and I don't feel that people should have to pass a test just to SWL, or that easy-to-use radios are somehow sissy or not "real SWL". Sure, I think it preferable that people learn how their tools work and how to get the most out of them, but it's also good to have tools that are easy to use. I do a lot of listening with a portable (ICF6500W) and enjoy it.

With the substitution of solid-state and offshore labor for "hollow-state" and domestic assembly, it's hard to compare value-for-money, but looking at the review

for the Sargent 10 ((I'd sent Michael info on the Sargent 10, an excellent commercial regenerative receiver of the mid-1930s - 1c)), I'm tempted to try the comparison to more recent sets. $40 in 1935 might equal $200 in 1965, enough for a SX110 or HQ100A; today it might be $500-$600 - enough for a Yaesu, Kenwood or even an I-COM. But how to compare?

As a teenager, I passed up the Knight & Lafayette regens for a GE Kit because "superhets are better (6 trans.)". So I'm no judge; I'm swayed by bells and whistles at least as much as other folks. In the 'sixties there were many regen circuits in Popular Electronics, Electronics Illustrated, etc. Now it seems as forgotten as the slide rule. Even the 1986 ARRL Handbook seems to have dropped it. But I realize how common they once were. A while back I saw an early HRO (regen type, I think) at a store around here. It seems from what he writes that Newkirk likes regens too.

I don't have the dough for a TVRO, and so far I don't miss it. Still, I can sense the fascination, especially to pick up a Eurosat....

PS: Since I finished the above, I completed some more tinkering with my R70. Per the suggestion in the latest Enjoying Radio, I changed the power supply transistor to a MJE3055. Is the radio better? I doubt it. Plus, in the process, I blew out the Zener reference diodes and had to hunt up replacements. Still I learned something about my radio in particular and power supplies in general.

Also, I modified my RIT for reduced range: greater vernier action in ECSS/NSHD/pseudo SSB detection. Easiest is to insert a 6.8k ohm resistor in series with R13 on the EF Board (4700 ohms, not 47k as the schematic says and its junction with R 20.) This can be done without removing the EF PC board, but space is tight. This gives about ½ the stock range ((which is plus/minus 800 Hz according to the manual)). You must realign the RIT to bring the "no change" position back to center, using trimpot R10. This can be done fairly well by ear, adjusting R10 while alternating between RIT "on" & "off", or connect a DVM between the wiper of R5, the RIT control, and adjust R10 for 0.00 v. when R5 is centered.

Adjusted for inflation, and considering the - in some areas - spectacularly improved performance, shortwave radios (and other electronic equipment) have never been a better value than they have been of late. The best radios of the 1930s excelled in the performance parameters design configurations of the time were most suitable to the achieving of, and which modern designs have not bettered. But any user of a Sargent 10 would have had his mind blown by the likes of an R2000 or FRG8800.

The only way not to miss a TVRO/RRO is never to have had one.

Gary Hickerson, AR: I have found another source of radio interference. I'm sure you've seen the TV ads for "Ultrasonic Bug Killers". I was given one of these. Supposed to work on the nerve systems of bugs, etc. I plugged it in and didn't think about it any more. The next day I was tuning the SW bands and heard this strange alternating noise everywhere on SW. At first I thought it was a new jammer. After some thought, I remembered that the "bug killer" has a test button on the back that makes the sub-audible sound audible so you can tell that the unit works. I pushed the button and sure enough, it made the same sound as was on SW. I unplugged the unit and the interference was gone!

Well, it looks like one bug at Gary's house - the DX bug - will be the saviour of the others.

Chris Dean, VA: Non-SWLs take easily to the little Sony dual-conversion bandspread analogue portables - they're simple, sensitive, moderately selective, and they work! Super-power listening is the rule, but two of the four persons that I know converted by these little gems have sought out SWL literature. Drawbacks of the IC-7600A and ICF-4910: poor dynamic range and poor audio quality. But 30-plus hours listening on a pair of pen-light cells to a shirt-pocket portable goes a long way towards de-mystifying shortwave. I also enjoyed BBC, HCJB, Hilversum, etc. during a recent 5-week hospital stay (in a ferro-concrete building), thanks to one of these small portables - while the ICOM sat home in its nest of cables.

Gerry Bishop, Clark AFB, Philippines: Buying a radio in Japan can be fun and memorable.

Well, this started out to be a user's review of the FRG-8800. Words failed me there. The great comparison of promised specs v. those realized is out of my ken. The control lay out is lined up fairly close to a usable style, though my fat fingers occasionally hit the wrong button. It works for me anyway. I hear what I want to hear if it's at all possible.

My job takes me to some unusual places, as well as some exciting ones. How-

ever, when flying schedules are put together, the days off seem to come in Kwong Ju (Korea) or Okinawa. I was fortunate, then, to get a mission Yokota AB (Japan) with a built in day off. Yokota is approximately two hours by train from downtown Tokyo, and I went off in search of the latest in electronic gimmicry and gizmos.

Akihabara, in Tokyo, is like nothing I've ever seen. If it runs on electricity it's in this district. My first ten minutes of open market (literally) perusal found four dealers selling the R71, FRG8800 and the NRD515, all at prices considerably less than US retail, but none had any powered up for demonstration. I continued on, seeking an amateur radio dealer with a full complement of gear.

I found X-1 after a short walk. The place was well lit, friendly, and accepted Mastercard. The three machines I sought to compare sat wired, powered and warmed up. A helpful and polite salesman assisted me in test tuning the radios. His English, though limited, was much better than my Japanese, so we communicated slowly in English.

I first tried the -515. It performed very well, slicing adjacent QRM out with ease. Sensitivity was remarkable. All I'd heard about it seemed true. Also true was the price. Though cheaper than the US cost ((currently $899 @ Gilfer - 1c via Hickerson)), it was still a bit more than my budget could stand. I went on.

The biggest in-store difference between the R71 and the FRG8800 was the price. Using the same antenna, each receiver pulled in and sliced out with similar results. The R71 had a slight edge on 60 m, but not enough to overcome a $59 price difference. For my uses, the difference was nil, so I took a closer look at the -8800.

My main interest in buying was to augment my shack while the SP600 goes into a long period of refurb and maintenance. The -8800 was equal to the task. But then came a stumbling block. There was no English owner's manual. Could we find one? Luck was with me. They had one in the back room.

After the 15 minute ritual, common in Japan, of paying and packing and wrapping and thanking and bowing and thanking some more, I went on my way, the proud owner of a FRG8800.

I was set to buy the R71 until the battery scandal came to light, so I went with prejudice. I was determined that the ICOM outperform the Yaesu by a wide margin or I'd not buy it. The promised ransom demand had to be worth it. I fear now, in retrospect, that some similar problem will plague the -8800. Yet some doubt is perhaps better than a sure loser.

One other item about buying in Tokyo. I carefully put my name and Yokuta address on the box before boarding the return train. Had I foolishly left it at the station, I have no doubt it would have arrived at the base within minutes of myself. Imagine the peace of mind if this were true of America.

And, yes, there is no US warranty or FCC tag. The Japanese warranty is good for one year, and there's an authorized repair center in Okinawa, where I'll undoubtedly have a day off, soon, if I need it.

Gerry provides these Tokio prices of equipment of interest (based on ¥212 per $): FRG8800: $420; FRG 9600: $350; R71A: $525; NRD515: $775. Options extra. Says the -8800 is worth $420, but not the US price of approx. $150 more.

...It is simple to use, after reading the owner's manual, and is selective and sensitive enough for most applications. Somehow, though, I think my SP600 will outperform it in the long run (assuming I can keep <u>that</u> "boat anchor" working indefinitely).

THOSE WISHING TO PURCHASE an American made "all wave" shortwave receiver may soon again have that rare opportunity as Ten-Tec, the Sevierville, TN manufacturer of Ham transcievers, have indicated their intention to market such a unit. Tentative specs and operating features appear to place it in the FRG8800/R2000 class. Of the "quasi-portable" type (operates on 8 C Cells as well as AC), the receiver reportedly will tune from .1 to 30 MHz with IF selectivities of 6 kHz and 2.7 kHz as standard with options available. 25 channel (w/ mode) memory capacity. The retail price is expected to be something under $500, which would make the receiver very competetive with similar import units. This could be a quality radio as Ten-Tec have a good reputation as producers of Ham gear. We hope this proves to be the case. Springtime release to the market is anticipated.

Drake are no longer producing the R4245, the fully synthesized version of the justly venerated R7/A. But servicing and parts for both receivers are evidently to be available indefinitely from the Drake concern. There are competent radio men (e.g., Mr Magne) who feel that the Drakes exceeded all other receivers, both SWL-consumer and professional, as DXing machines. And continue to exceed them in this respect.

(AND WHY DOES THE FINAL IN THE BBC'S RELAY TRANSMITTER ON 9515 KEEP LOSING EXCITATION AS I WRITE THIS TRYING TO LISTEN TO "SCIENCE IN ACTION" / DAMMIT BOYS, GET IT ON ONE OF THOSE EMPTY SUB-CARRIERS ON ANIK D!)

S A T E L L I T E W A T C H

by Loren Cox

IT IS TO BE HOPED
that my TVRO/RRO excitement
has not been too boring for others.
But it is difficult to restrain myself
in regard to a medium which, for the first
time in radio history, makes it
possible to receive
at continental (& intercontinental) distances
video & audio programming,
often in pristine fidelity,
directly from the originating programmer,
with one's own receiving equipment -
equipment no more expensive
than the best HF receiving gear.
Broadcasters, both domestic & foreign,
seem amazingly obtuse
in regard to exploiting this medium
for direct broadcast purposes.
Most of the former, apparently,
are able to think of satellite transmission
only as a means of linking with cable outlets
and affiliated ground stations,
and the latter as a means of feeding
relay stations still operating
on old fashioned HF - admittedly the best
way still to reach an audience by wireless
in large areas of the world.
But the private TVRO/RRO users must comprise
the largest "invisible" audience -
so far as the established broadcasters
are concerned - in the history
of wireless transmission.

a "Halley's Comet Channel" -
on "C" Band - appears to be Spacenet 1/1;
have received HC photography,
computer enhanced with non-natural colour,
on that channel -
provided by Notre Dame & Fermilab.

AND "BLACK WEDNESDAY",
15 Jan., has come & gone
with fulltime encryption of HBO/Cinemax
as the first step in that ignoble experiment
dedicated to the "protection"
of satellite transmitted program services
and to the economic interests
(which are paramount over all others?)
of the television-distributed-by-cable
business in the United States.

The unanticipated proliferation
of private TVRO/RRO terminals has produced
a complex of conflicting rights & interests
complicated still further
by the greed & fear
of an obsolete technology (cable).

FREEDOM OF ACCESS to the airwaves
for personal listening & viewing - a freedom
now under attack from several quarters -
has been an American tradition: no area
of the radio spectrum has ever been declared
"off limits" - the only proviso being
that such viewing/listening
be without malicious intent or with the
objective of personal gain.
The idea of "protected" channels
on the airwaves, available only to those
who pay
to view/listen to them
is quite new
as is the means of their trans-
mission:
a form of wireless to which it was not
believed large numbers of the public
would ever have access:
but now
they do,
just like medium wave, shortwave, VHF & UHF
terrestrial transmissions are available
to them. HOW LEGITIMATE
is the use of the public's airwaves
for forms of "broadcasting"
not intended for general public view-
ing/listening??

It is only by means of "non-wireless"
technology (the best being fibre-optics)
that "protected" channels will ever have
the security they seek (we would count
ground directional microwave, though
wireless,
among the "non-wireless" technologies
here). It is my view
that any program service now on
satellite that does not make a good faith
effort
to make their programming
available
on terms at least commensurate
with that available to a cable customer
should be required to go
to a "non-wireless" means
of getting their signal to the cable
companies with which they have cast
their lot.

WHEN THE UPLINKING COMPANY
that provides WGN scrambles their
signal will WFMT & other sub-carrier
services on G1/3 be left in the clear?
Presumably (surely) the audio sub-carrier
services riding soon to be
scrambled video-plus-audio-for-same
will be left alone
leaving us radio a-plenty
with which I can be content,
Galaxy 1
and Anik D
being the satellites for classical mx
all in discrete stereo
than which no ground FM station
within my hearing
can equal in audio fidelity.

AND REGRET TO REPORT
that "The Frantics" have left CBC Radio
(I hope only temporarily) for television

being seen on Thursdays @ 7:30 pm E (Anik D/20, 1 hour earlier on CBC North, /19). The first show, despite some amusing episodes, including how Mr Canoehead got that way, was not up to the level of the radio show, confirming again
that between the two, radio & television, the former is the superior medium?

- THE PHOTOGRAPHIC RESULTS
of the Voyager 2 flyby of Uranus and environs have been viewable via the NASA Contract Channel, Satcom F2/13 (& sometimes Satcom F1/18; also noted bars up on F2/2, which is used for NASA material, after last evening's (22/1 E) broadcast ended). Commentary and discussion provided. All courtesy NASA & the JPL. The received signal voltage is inconceivably small - in the 1930s it was thought that very high powers were necessary to transmit RF at astronomical distances. In 1938 a "UHF" radio signal was directed from the Earth toward Mars but no Martians responded. Fascinating to watch this most distant relatively-close-up-to-an-astronomical-object photography ever received.

23/1, 11:10 E, the Uranian disc on my screen,
the photographing vehicle 1,499,000 km above the cloud cover,
the show to improve
with closer approach
and then
and then
it's on to Neptunuus! -

so that if every "entertainment" channel were scrambled having the opportunity to observe the continuous coverage of events such as these makes a TVRO certainly worth having (God! they wouldn't scramble the NASA Contract Channel would they?!)

BUT PBS (four channels of which can be seen on Westar 4) are threatening to scramble lest viewers cease to be dependent upon their local PBS station (if they have one) and cease to contribute to its funding. Well, we have a PBS station here, that multipathed mess, WKLE (46)

(Uranian moon Titania on the screen, features becoming discernable)

which it would be foolish to watch when pristine PBS reception is available from the "bird" - and only an idiot, totally unaware of television reception problems "in the field", would wish to deny me; besides I can see PBS programming WKLE doesn't carry.

(now we have Ariel in view)

And see (in Microwave Systems News) that PBS are going to upgrade their antennas, both for the Washington uplink as well as new receive dishes to be provided the affiliates (needed in order to insure proper operation with 2 degree birdspacing). Don't know how much money this will leave for encryption/decryption devices: may all be included in the same program.

AGAINE: IT SHOULD NOT BE PERMITTED THAT ANY ADVERTISER SUPPORTED BROADCASTING SERVICE BE UPLINKED IN A SCRAMBLED MODE; IT SHOULD NOT BE PERMITTED THAT ANY BROADCASTING SERVICE WHOLLY OR PARTLY FUNDED BY TAX MONEYS BE UPLINKED IN A SCRAMBLED MODE.

But it appears that at least some of both will be scrambled. A dangerous precedent: for what is to prevent any ground station from encrypting its signal and charging a fee for its reception? Would the "television enslaved" American public do anything but pay?

(REMARKS WERE MADE IN THIS SPACE CRITICAL OF THE INTERRUPTION OF THE "URANUS SHOW" FOR A FEED FROM THE KSC HYPING THE "TEACHER IN SPACE" CHALLENGER FLIGHT AND CRITICAL OF A PART OF THE CONCEPT BEHIND THAT FLIGHT. BUT IN VIEW OF THE "MAJOR MALFUNCTION" WHICH ENDED THIS MISSION IT WAS FELT ANY STATEMENT UNCOMPLEMENTARY TO IT SHOULD BE OMITTED.)

27/1: AND THE SHOW IMPROVED all right, beyond all expectations following the spectaculars at Jupiter & Saturn. As an exercise in data retrieval the Uranus flyby was remarkable, the spacecraft, through ingenious reprogramming, performing tasks seemingly beyond its capability.

And the several days coverage available via the NASA Contract Channel was superb. Pictures were transmitted as soon as available, with numerous updates, discussions with, & presentations by, members of the various scientific teams involved. There was startling photography, the show stopper being moon Miranda with its variagated terrains.

As with all good scientific endeavour, there were discoveries that answered some questions, as well as observations that generate other questions and speculations to explain the phenomena. To see the story unfolding on my own video screen was a thrilling & rewarding experience: the finest reward thus far for having a TVRO terminal at my disposal

NASA CONTRACT CHANNEL, SATCOM F2/13 / images of
awe
experienced in the awe
at those amazing photographs
of Miranda
et
al
followed so briefly
by the awe
of
spectacularly horrible
accident -

from the marvellous results
of technological
ingenuity
to the tragic consequences
of technological
fault -

in a primitive propulsion
system
in essence
a bomb
a
bud
that could not be contained
forever
true
to its chemestry & nature
burst
into magnificent flower
shedding its firey seeds
"semina motuum"
of incandescing machine & man

a
bird
briefly
of brilliant plumage

"a
major
malfunction"
"we have no
downlink" -
appropriate
technical terminology
data readout confirming
before mind
can
confirm the eyes -

"an accident
happens
so
fast"

becoming an image
upon my eyes
@ 525 lines 30 frames per second -
now
a frozen frame
upon the memory
an instant
that does not exist in time
which only recommenced
with the full realization
of what we have seen -
the cameras left
on with nothing left to look at
except the nearby ocean
perfectly calm
as it pursues its ancient oceanly business
oblivious of that
which has just occurred
in the deep blue skies above it
but receiving again
as always
without acknowledgement
man's accident & wreckage

The history of man
is the result of imperfection &
error -
in himself
& his machines -
which provide him
heroic opportunity -

opportunities for heroism
in the overcoming of those imperfections
and errors
in significant achievement
and the possibility of tragedy (heroic)
in succumbing to them

"We knew the risks...
"Things have come out badly
against us
"And we have no cause for complaint"
(Scott
of the Antarctic, memorialized
in this music, Symphonia Antarctica
encumbering my consciousness
via WFMT, G1/3 6.3-6.48
at this moment of writing)

and now
the days of "analysis"
that follow such an event
as the shuttle disaster:
the need to "explain", to "understand"
at least as partial compensation
of the public's psychic hurt/
grief, dismay/
that the particular circumstance
or set of circumstances
to the extent that it or they may be
determined to have been the "cause"
shall not occur again

But modern technology
has produced a new sort of hero
whether he succeed or perish
responsible for little more
than his own "heroism"
(tho' he not conceive of it as such)
being almost wholly dependent
upon the fallable mechanisms
of companies of fallable men

Humanity sees heroes
in what was but a programmed sequence
of events / prematurely ended...

By David Newkirk, The ARRL Letter

SPIRITUALITY

January 29, 1986. The American flag in the front parking lot at ARRL HQ was flying at half-mast as this writer arrived for work at 9 AM. You know the reason. Seven of us had embarked on a quest the previous day, never to return. Another of us, the President of the United States, had eulogized them later on that terrible day. "We will never forget them," Ronald Reagan said. "nor the last time we saw them, this morning, as they prepared for their journey and waved goodbye, and slipped through the surly bonds of earth, to touch the face of God."

They rose aboard a species of machine, a machine called Shuttle Challenger. We have had great success with machines. Less than a week before Challenger took to the sky, we'd ohhed and ahhed images brought us by another stupendous machine: Voyager 2, away from Earth for so many years, chugging out those stunning vistas of Uranus and its moons, signals taking so many minutes to reach us, pictures so clear. What a machine! Some of us — radio amateurs, we're called — may even have witnessed the retransmission of some of those images in our amateur bands, from the Jet Propulsion Laboratory, from W6VIO, just as many of us may have heard Amateur Radio signals emanating from Challenger so few months ago, when several of our number were part of her crew — all brought us by our collective handiwork: wondrous machines, systems going well, networks holding together. But recall that there were cold eyes in a mindless construct feeding us those images; it took **our** imaginations and intellects, after **our** eyes and brains had scanned the images from Voyager, to do the ohing and ahhing, the dreaming — and the going on.

This is why there were seven people aboard Challenger on January 28, 1986. It's too inhospitable out there near Saturn and Uranus, sure — our machines haven't yet been perfected to the point where they'll get any of us out there to do the real-time real-space dreaming and get us safely home again. So we send a machine and prepare to be thrilled from afar. We don't stand for this "thrilled from afar" stuff any longer than we need to, though. The idea is to get out there and do it ourselves. The intent is to feel the real hands grasping the actual controls, to let the true light fall on the living retinas. Why? Because our push into space is arguably the greatest spiritual quest on which humans may collectively embark. It's in the blood, it's built into our cells.

"Whoa, The ARRL Letter's talking spirituality; break out the Halon extinguishers!" Not at all. The first experiments trying to crack the radio "nut" last century were part of the same spiritual quest to which the Challenger crew were committed. Our first lispy blurps on five meters were more of the same. We got there with machines of wire and glass, and with deceptively little risk, but with machines no less wondrous even if tossed together on a kitchen shelf. The goal, this writer insists, is primordial: humankind, Us with a capital 'u,' expanding beyond where and what we are — an enormous slow yearning over myriad generations to push from the known into the unknown. The expansion of mankind right before its own eyes. If that isn't spirituality, what is? Sure, our society is vast, the means through which we individually participate in the push into space democratic and bureaucratic — long concatenations of taxes, politicians and specialists between each of us and those chosen to "push back the envelope" — but the quest is what it has always been: utter spirituality, everything on the line.

That's why the slug in the gut when we saw Challenger fall. **That's** why the dazedness, the anger, the flags at half mast. Seven of us we **instinctively** realize we had utterly accepted — and loved — as our proxies in that quest, gone. No rejoicing, as we'd planned — but still the dreaming, and the going on.

January 28, 1986

Gregory B. Jarvis — Ellison S. Onizuka
Christa McAuliffe — Judith A. Resnik
Ronald E. McNair — Francis R. Scobee
Michael J. Smith

The ARRL Letter January 30, 1986

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DOMESTIC INFORMATION & ASSOCIATED LISTENING

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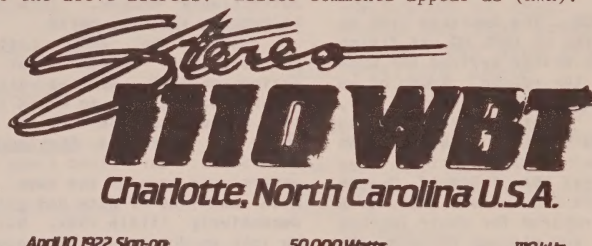
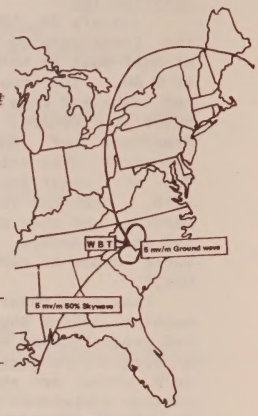
WBT logo and coverage map provided by Bob Denny, Chief Engineer.





NHL Radio Directory(The Hockey News via Ken Collins, Atlanta GA)(KWK: Ken, I would appreciate the baseball list when available.) BOSTON BRUINS: WPLM AM(1390) & WPLM FM(99.1)(both are Plymouth MA) Play-by-play(Bob Wilson), Color(John Bucyk) BUFFALO SABRES WBEN(930)(Buffalo NY) Play-by-play(Ted Darling), Color(Jim Lorentz) CALGARY FLAMES CHQR(810)(Calgary AB) Play-by-play (Peter Maher), Color(Doug Barkley) CHICAGO BLACK HAWKS WBBM(780)(Chicago IL) Play-by-play(Bruce Martyn), Color(Sid Abel) EDMONTON OILERS CFRN(1260)(Edmonton AB) Play-by-play(Rod Phillips), Color(Ken Brown, Jim Matheson) HARTFORD WHALERS WTIC(1080)(Hartford CT) Play-by-play(Chuck Kaiton), Color(Andre Lacroix) LOS ANGELES KINGS KLAC(570)(Los Angeles CA) and KGIL(1260)(San Fernando CA) Play-by-play(Bob Miller), Color(Nick Nixon) MINNESOTA NORTH STARS KSTP(1500)(Saint Paul MN) Play-by-play(Al Shaver), Color(Tom Reid) MONTREAL CANADIENS CFCF(600)(Montreal PQ) Play-by-play(Dick Irvin), Color(Ron Reusch) NEW JERSEY DEVILS WMCA(570)(New York NY) Play-by-play(Larry Hirsch), Color(Fred Shero) NEW YORK ISLANDERS WOR(710)(New York NY) Play-by-play(Barry Landers), Color(Jean Potvin) NEW YORK RANGERS WNBC (660)(New York NY) Play-by-play(Marv Albert), Color(Sal Messina) PHILADELPHIA FLYERS WIP(610)(Philadelphia PA) Color(Bob Taylor) PITTSBURGH PENGUINS KDKA(1020)(Pittsburgh PA) Play-by-play(Mike Lange), Color(Paul Steigerwald) QUEBEC NORDIQUES CHRC(800)(Quebec PQ) Play-by-play(Alain Crete), Color(Alain Belisle) ST. LOUIS BLUES KXOK(630)(St. Louis MO) Play-by-play(Dan Kelly), Color(Joe Micheletti, Ron Jacober) TORONTO MAPLE LEAFS CJCL(1430)(Toronto ON) Play-by-play(Joe Bowen), Color(Bill Watters) VANCOUVER CANUCKS CKNW(980)(Vancouver/New Westminster BC) Play-by-play(Jim Robson), Color(Gary Monahan) WASHINGTON CAPITALS WTOP(1500)(Washington DC) Play-by-play(Ron Webber) and WINNIPEG JETS CKY (580)(Winnipeg MN) Play-by-play(Curt Keilback), Color(Ken Nicholson).

Pro Basketball continuing: MILWAUKEE BUCKS WTMJ(620)(Milwaukee WI)(from Bill Romberg, Milwaukee WI)

Oldies continuing: FRIDAY NIGHT WOL(1450)(Washington DC) HOUSE PARTY; SATURDAY NIGHT WOWO(1190) (Fort Wayne IN) SOLID GOLD SATURDAY NIGHT(RKO Network); SUNDAY MORNING WPRW(1460)(Manassas VA) GARY OWENS' SUPERTRACKS; SUNDAY NIGHT WOWO(1190)(Fort Wayne IN) LOOKING BACK WITH LOVE, WFIR(960)(Roanoke VA) GARY OWENS' SUPERTRACKS

(TV/CABLE WEEK from the DENVER POST via Patrick M. Griffith, Denver CO)

METROPOLITAN DENVER RADIO STATIONS

AM

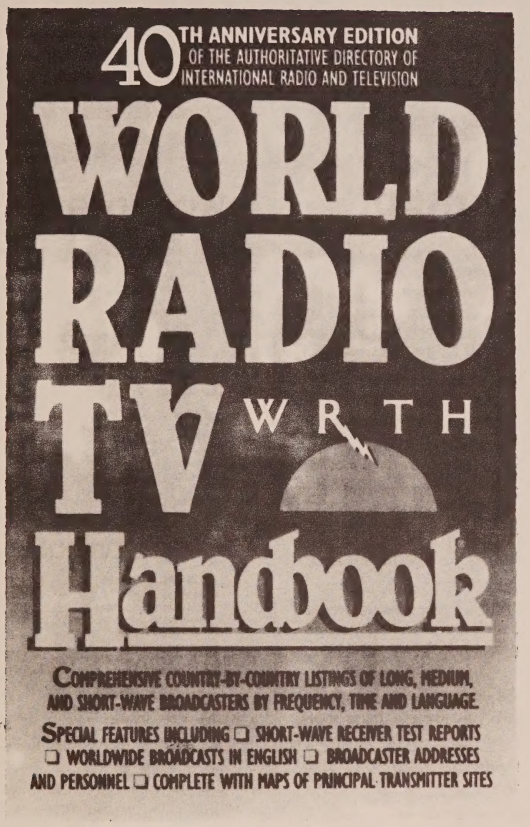
KLZ Country	560
KHOW Adult music	630
KNUS Talk	710
KLTT Contemporary Christian	800
KOA News, sports, talk (CBS)	850
KPOF Religious	910
KIMN Adult music	950
KRKS Religious	990
KLMO Adult music (Longmont)	1060
KLSZ Adult contemporary	1090
KRZN Rock oldies	1150
KBCO Adult rock	1190
KBNO Spanish language	1220
KBRQ Country (ABC)	1280
KDEN All news (NBC, ABC, MBS)	1340
KTMG Country music, ag news	1370
KEZW Nostalgia music	1430
KBOL Adult music (Boulder)	1490
KDKO Urban contemporary	1510
KQXI Religious	1550
KRXY Adult hit music, sports	1600

FM

KGNU Public radio (NPR)	88.5
KCFR Public radio (NPR)	90.1
KWBI Religious	91.1
KADX Jazz	92.1
KBVL Classical music	94.7
KPKE Adult rock	95.7
KBCO Album rock	97.3
KYGO Country	98.5
KVOD Classical music	99.5
KMJI Adult contemporary	100.3
KOSI Easy listening	101.1
KOAQ Adult contemporary	103.5
KBRQ Country (ABC)	105.1
KBPI Album rock	105.9
KAZY Adult rock	106.7
KRXY Adult hit music	107.5

WILC ex WLMD (900) Washington DC has gotten another Spanish language station in addition to WMDO(1540)(see DIAL in RIB 105 for WMDO information). The call letters represent the owner initials -- Israel Lopez. WILC's Spanish programming will replace WLMD's mix of pop, rock and oldies.

That's going to do it for this month. Coming up in the following months will be a new feature--FORMAT FOCUS and the return of Major League Baseball. Until next time, 73.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